THE UNIVERSITY OF ALBERTA

PERSON PERCEPTION AND CONFORMITY BEHAVIOR OF AUTHORITARIANS

BY

JOHN CHARLES REDDER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

DEPARTMENT OF PSYCHOLOGY

EDMONTON, ALBERTA

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Person Perception and Conforming Behavior of Authoritarians" submitted by John Charles Renner in partial fulfilment of the requirements for the degree of Master of Arts

ABSTRACT

The authors of the Authoritarian Personality (Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950) developed the Fascist (F) scale and described in detail the differences in attitude expressed by subjects scoring high as compared to subjects scoring low on this scale. The results of their research indicated that high scoring subjects would be more hostile, would conform more, and would express dislike for members of minority groups more readily than low scoring subjects. Subsequent research has not demonstrated, in a conclusive manner, the validity of these predictions. Also, in further opposition to the predictions of Adorno and his colleagues (1950), several studies have indicated that subjects achieving an extremely high or extremely low score on the F scale may be quite similar to one another relative to the subject achieving a moderate F scale score.

The present investigator felt that the frequent failures of the authoritarian to behave as predicted in the Authoritarian Personality (Adorno et al., 1950) was largely due to the fact that many researchers conducted studies which failed to take into consideration crucial facets of the authoritarian's personality other than their one or two variables of immediate experimental interest.

The present study was not amenable to the formulation and testing of specific hypotheses since relatively novel combinations of independent and dependent stimuli were used. Furthermore, the particular area of research, authoritarianism, is so replete with

inconsistent research findings that few hypotheses are logically defensible.

In the present study, the race of the subject's partner was varied (Caucasian or Indian) as were his comments to the subject (neutral or insulting). Following these comments, the subject and this partner engaged in a mutual weight judging experiment and a personality judging experiment. The personality of the experimenter was also judged following the subject's judgment of his partner's personality.

Generally speaking, the high authoritarians did not conform more (on the weight judgments), nor did they act in a more hostile manner toward either the Caucasian or Indian partner, than did the low or the moderate authoritarians. In fact, the low authoritarians tended to rate their partner more negatively than either the moderate or high authoritarians. Furthermore, the low authoritarians were the only group who were relatively consistent in attributing more negative personality traits to their partner when he was an Indian than when he was a Caucasian. There were a number of significant interactions among variables, but they were of such a nature as to defy the conciseness of description demanded in an abstract.

Acknowledgements

After an intensive survey of many acknowledgement pages, an initial feeling of embarrassment regarding my wish to extend a most effusive message of thanks, blessings and good-will to my Committee has been considerably alleviated. In fact, rather than attempt to achieve the subtle blending of charm, buoyancy and depth of feeling conveyed by some of these masterpieces of yesteryear, I hereby attribute to Dr. Rule, Dr. Blanchard and Dr. Spearman the most propitious combination of their respective past accolades.

John Charles Renner

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Introduction

The Authoritarian Personality (Adorno, Frenkel-Brunswik, Levinson and Sanford, 1950) presents the results of a research program designed to investigate the psychological roots of anti-Semitism. A basic assumption guiding this program was that the anti-Semetic individual holds certain other racial and non-racial attitudes much more frequently than the non-anti-Semetite. Furthermore, the development and expression of such attitudes are consistently associated with certain personality characteristics of the individual. The program includes studies on such diverse subjects as ethnocentric attitudes, political and economic conservatism, potentiality for the acceptance of anti-democratic propaganda and, finally, the needs and traits revealed in interviews, TAT stories, and projective questions.

In the course of their investigations the authors developed several scales which were concerned with the measurement of various types of ideologies. However, their Potentiality for Fascism (F) scale was concerned with measuring a personality type as opposed to the tapping of superficial ideological attitudes. Originally, its primary function was to serve as an indirect measure of ethnocentrism. Material collected from the clinical interviews indicated that ethnocentric individuals possessed underlying central trends which constituted an enduring unitary syndrome, or personality type. These trends, in accordance with certain unspecified dynamic processes, were expressed in ethnocentric attitudes as well as other diverse psychologically related opinions and attitudes. An outstanding characteristic of this

syndrome, or personality type, was the expression of an almost pathological interest in authority, thereby leading to the concept of "authoritarian personality". The list of those central trends, or personality characteristics provides the most satisfactory definition of authoritarianism presented in The Authoritarian Personality and, thus, is reproduced below as originally presented (p. 228).

a. Conventionalism. Rigid adherence to conventional middle-class values.

b. Authoritarian submission. Submissive, uncritical attitude toward idealized moral authorities of the ingroup.

c. Authoritarian Aggression. Tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional attitudes.

d. Anti-intraception. Opposition to the subjective, the imaginative, the tender-minded.

e. Superstition and stereotypy. The belief in mystical determinants of the individual's fate; the disposition to think in rigid categories.

f. Power and "toughness". Preoccupation with the dominance-submission, strong-weak, leader-followers dimension; identification with peer figures; overemphasis upon the conventionalized attributes of the ego; exaggerated assertion of strength and toughness.

g. Destructiveness and cynicism. Generalized hostility, vilification of the human.

h. Projectivity. The disposition to believe that wild and dangerous things go on in the world; the projection outwards of unconscious emotional impulses.

i. Sex. Exaggerated concern with sexual "goings-on".

Adorno and his associates (1950) constructed the F scale to identify those individuals who were ethnocentric and who would tend to accept the ideological dispensations of the extreme political right, or Fascists. In fact, both Coulter (in Brown, 1965) and Rokeach (1960) have demonstrated that individuals accepting a Fascist ideology scored high on the F scale while individuals accepting a communist ideology or left-wing view, scored low on the F scale. In the course of the study by Adorno's group (1950), Frenkel-Brunswik interviewed individuals scoring high or low on the F scale and concluded that the high scorers, or high authoritarians (HA), possessed very different personality traits than the low scorers, or low authoritarians (LA). On the other hand, "armchair" interpretations by an historian (Schlesinger, 1949) and a political scientist (Hoffer, 1951) have concluded that communists and fascists are more similar to one another in terms of personality traits than either extreme is to the individual expressing a politically moderate point of view. These interpretations have been supported by two empirical studies (Krugman, 1951; Vetter, 1930). Christie and Jahoda (1954) have noted that most researchers, on the strength of the conclusions by Frenkel-Brunswik, have used the F scale as if it were a measure of "general" authoritarianism. In other words, researchers have dealt with the concept of authoritarianism as if it implied political right-wing inclinations only, thereby eliminating by definition the left-wing authoritarian. However, Shils (in Christie & Jahoda, 1954) suggested that the central trends defining the HA could

also be found in the LA. Since LAs are typically oriented toward the political left-wing, this would invalidate the concept of the general authoritarian as defined by Christie and Jahoda (1954). Shils re-analyzed the content of the original interviews which Frenkel-Brunswik (in Adorno et al., 1950) had conducted with the extreme scorers on the F scale and he concluded that the possibility of an authoritarian of the Left had not arisen due to the personal biases of the interviewer. He then presents several examples from the original interviews of Frenkel-Brunswik which illustrate the fact that the similarities between the extreme scorers on opposite ends of the F scale had apparently been ignored while the differences between them had been over-stated. Adorno (in Adorno et al., 1950) in his chapter on Types and Syndromes in The Authoritarian Personality, distinguished five sub-types of the LA and noted that some of these sub-types such as his "rigid" and "protesting" low scorers may resemble the high scorers in the psychological sense although the content of their views would differ. However, this suggestion was offered only in passing and was evidently not considered important enough to warrant further discussion or investigation. In a later publication, Frenkel-Brunswik (in Christie and Jaboda, 1954) agreed with the above conclusions only as far as the "rigid-low" was concerned.

Adorno and his associates (1950) made numerous specific predictions regarding behavior that would distinguish the HA from the LA. Yet, several investigators have demonstrated that, with regard to some of these more important predictions, the LA and HA groups have been more

similar to one another than either has been to the MA group. For example, Taylor (1952, 1960) demonstrated that both the LA and the HA tended to act in a more rigid manner and achieved perceptual closure more readily than did the MA. Siegel (1956) reported hostile behavior by both the HA and the LA, but the HA tended to express hostility overtly while the LA tended to express hostility covertly (as measured by the Rorschach test). Bounds (1964) noted no difference in the tendency for the HA and the LA to attack an insulting stooge while Abrams (1965) found that he could manipulate the tendency of the HA to express hostility by varying the degree of self-protection involved. Finally, Crutchfield (1954), Lipetz (1960, 1964) and Scodel and Freeman (1956) have shown that both the HA and the LA tend to give more stereotyped interpretations of the personality of strangers than does the MA.

Since the F scale was constructed to be an indirect measure of ethnocentrism, there are several similar studies on tolerance and intolerance that also apply to the proposed similarity between the HA and the LA. For example, Dombrose, and Levinson (1950) demonstrated that the subjects in the upper and lower quartiles of the ethnocentrism scale (E scale) tended to use more militant measures in solving a hypothetical social problem than did the MA. Furthermore, Rokeach (1951) noted that although subjects scoring in the lower quartile of the E scale defined ideological items more abstractly than the subjects scoring in the upper quartile, both extremes showed a greater tendency for reification than did the middle quartile. Finally, both Taft (1958) and Haimowitz and

Haimowitz (1950) reported a greater similarity on personality tests and interviews between extremely tolerant and intolerant subjects than between the moderately tolerant subjects and either of their extreme groups.

Thus far, the discussion has dealt with the general problem of predicting an individual's behavior when only the F scale score is known. It is suggested that these failures of prediction may be due, at least in part, to an insufficient body of knowledge concerning the personality characteristics of the LA. Furthermore, in spite of the fact that the personality characteristics of the HA are relatively well established, it is quite common for experimenters to control only those situational variables which are related directly to the particular facet of personality under observation. This failure to consider the situation in terms of the total personality implies a regression to a mosaic theory[1] of personality which Adorno and his colleagues (1950) went to such great lengths to discredit.

The present study will deal with the HA, MA and LA in terms of three rather broad areas of theoretical interest:

1. Attitudes toward minority group members;
2. Expression of hostility;
3. Conforming behavior.

Previous research conducted in these areas will be analyzed in terms

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[1]The mosaic theory implies that an individual's personality consists of a conglomerate of discrete, non-interacting elements, or traits.

of the similarities or differences noted between the HA and the LA and the apparent failures of theoretically sound predictions.

Racial Prejudice.

For example, since the F scale was designed as an indirect measure of ethnocentric attitudes, Adorno (in Adorno et al., 1950) predicted that the HA would hold more negative attitudes toward minority groups than would the LA. Although this prediction was supported when subjects were asked to respond on a paper and pencil measure, many studies have not succeeded in extrapolating these findings to predictions concerning behavior in an interpersonal situation. For instance, Bray (1950), Carr and Roberts (1965), Linn (1965), Pace (1950), Roberts and Carr (1961) and Searles and Williams (1962) failed to demonstrate the expected relationship between scores on attitude scales regarding Negroes and the actual behavior in the presence of a Negro. It is suggested that these failures to establish a relationship between attitudes and situational behavior were due to the attempts of most experimenters to deal with racial attitudes as if such attitudes could be isolated from the rest of the personality. This approach was taken in spite of the fact that the Adorno study (1950) had demonstrated that the racially prejudiced person possesses other personality characteristics which will interact with his racial attitudes to determine behaviour. A prejudiced person would, for instance, tend to be submissive toward authority figures. Thus, his desire to behave negatively toward a minority group figure would be tempered by, among other things, his consideration of how such behavior would be evaluated by any authority figure present. Since

an experimenter is seen as an authority figure, the results in such experiments dealing with racial prejudice will be biased accordingly. In addition, Adorno and his colleagues (1950) have demonstrated that the HA expresses an over-concern with adhering to the rules and conventions of society. Consequently, the behavior of the HA would most certainly be affected by the fact that aggression toward others is frowned upon by societal conventions. Related to this point is the finding by Adorno (1950) and Allport (1954) that virtually all of their prejudiced subjects were not only aware that their racial attitudes were socially undesirable but also expressed guilt feelings regarding these attitudes. It seems obvious that a study of the relationship between prejudice and behavior should consider at least such additionally important determinants of behavior as discussed above. In the present study the HA's concern with social convention and authority figures was minimized by having the subject insulted in an unexpected and arbitrary manner by a peer. Such conditions have been demonstrated to release one's inhibitions to aggress. Although society frowns upon unjustified aggression, justified aggression is seldom punished, and even occasionally rewarded (Berkowitz, 1960; Burnstein & Worchel, 1962; Cohen, 1955; Pastore, 1952; Rothaus & Worchel, 1960). Such conditions would seem particularly important for the prejudiced person because he is provided with a socially acceptable reason to aggress over and above his socially unacceptable inclinations based purely on prejudice.

Hostile Behavior

According to the Adorno study (1950) the HA is supposed to be more hostile than the LA. Although this finding has been supported by a great number of studies, there are indications that, under certain environmental circumstances both the HA and the LA will tend to be more hostile than the MA. For example, Bounds (1964) demonstrated that in a war game the LA and the HA tended to aggress more readily than the MA. Abrams (1965) using a similar game, demonstrated that the LA aggressed more than either the HA or the MA when humanitarian motives and willingness for self-sacrifice were involved. Both Siegel (1956) and Rule (1966) demonstrated that both the HA and the LA displaced hostility to a neutral peer more than did the MA. Responses on a projective test and responses on an adjective check list, respectively, were used as measures in these studies. It is important to note that such displacement is not, apparently, directionless. Weatherley (1961), using responses on a projective test as a measure of aggression, demonstrated that while the HA aggressed more against a Jew than a non-Jew, the LA aggressed more against the non-Jew than the Jew. In the present study it was expected that responses similar to those demonstrated by Weatherley would occur, although the measure of hostility was scored on an adjective rating scale rather than an analysis of responses on a projective test. The assumption was that the unconscious need not be tapped as in the Weatherley (1961) study if the situation is carefully designed to encourage the free expression of otherwise suppressed attitudes.

In addition to the general problem regarding the difference between the HA and the LA in the expression of hostility, there are studies which suggest that the HA and the LA may be distinguished by the extent to which hostility is displaced under varying degrees of stress. Concerning the manner in which hostility is expressed by the HA and the LA, Frenkel-Brunswik (in Adorno et al., 1950) concludes that

> reports about blind rage, temper tantrums, and bad temper in general (are) often found in the records of high scoring subjects . . . (but) the expression of aggression in low scorers shows, by contrast, greater awareness of the cause of aggression which thus tends to become more specific, and to be directed against a certain person or against the violation of a general principle. (p. 450).

Berkowitz (1959, 1961) has supported this description by demonstrating that under stress, the highly prejudiced person tends to be less discriminating in his displacement of hostility than does the LA. On the other hand, Rule (1966) has demonstrated that both the highly prejudiced person and the low prejudiced person tend to be less discriminating under stress than the moderately prejudiced person. These latter findings are in accord with Rokeach's theory (1960) which holds that persons who espouse extreme points of view differ with regard to cognitive structure from persons holding more moderate points of view. Rule interprets the apparent incompatability between her findings and those of Berkowitz as being due to the fact that she used much more extreme scoring groups than did Berkowitz, thereby being more assured of not contaminating her sample of subjects holding extreme attitudes

with those subjects holding mildly extreme attitudes. The present study has also utilized extreme scoring groups for the purpose of studying any similarities or differences in the behavior of these extremes over a variety of situational conditions and dependent measures.

Conformity Behavior

With regard to the differences in conformity behavior of F scale scorers, Adorno and his associates (1950) predicted that the HA will conform more than the LA because

> it seems possible that the rebellious tendencies have not actually been outgrown but have rather been inhibited so that the emphasis on conformity now serves as a defense against underlying hostility toward accepted authority. (p. 162)

Some studies have given empirical support to this prediction by demonstrating a relationship between F scale scores and conformity behavior (Beloff, 1957; Crutchfield, 1955; Nadler, 1959; Wells, Weinert and Rubel, 1956), but others have found no such relationship (Chipman, 1964; Gorfain, 1961; Hardy, 1957; Weiner & McGinnes, 1961). Still other investigators have demonstrated that the relationship holds only if certain qualifications are considered. For example, Berkowitz and Lundy (1956) showed that the person scoring high on the F scale was usually a conformer if he was also low on interpersonal confidence. Millon and Simkin (1957) reported that the HA would conform more than the LA if the model were a prestige rather than a non-prestige figure. Steiner and Johnson (1963) noted that this relationship between F scale and

conformity applied only as long as there was complete unanimity among the rest of the group.

In order to point out the disagreement which abounds in this area, it is relevant to consider the indirect line of evidence which suggests that, given the proper conditions, the LA can be expected to conform at least as much as the HA. While Taylor (1952, 1960) demonstrated that the HAs and LAs showed approximately equal tendencies to seek perceptual closure more rapidly than did the MA, McDavid and Sistrunk (1964) found that people who are particularly persistent in seeking perceptual closure tend to be conformers in an ambiguous stimulus situation. Finally, Cook (1958) has reported that both HAs and LAs tend to be more easily persuaded by the experimenter than are the MAs.

There have been no studies reported in which the LA has conformed more than the HA but the conditions may be optimal for such an occurrence if the confederate were a minority group member. This prediction would be based on the many conformity studies which have demonstrated that the incidence of conforming behavior is positively correlated with the attractiveness of the group (Back, 1951; Berkowitz, 1957b; Dittes and Kelley, 1956; Deutsch and Gerard, 1956; Gerard, 1954; Thibaut and Strickland, 1956). Of course, an even more critical assumption would be that the expression of positive (LA) or negative (HA) affect toward a minority group is analagous with a subjective feeling of attractiveness or repulsion toward the individual person in a conformity situation. In non-laboratory settings it is quite common for the low-prejudiced person

to act in a positive, accepting manner toward a member of a minority group while the high-prejudiced person will act in a negative, rejecting manner toward the same individual. However, clinical psychologists frequently infer that persons expressing extremely positive or negative attitudes toward some facet of their environment may, unconsciously, harbor attitudes which are precisely the obverse of their expressed attitudes. The evaluative nature of a response in a conformity situation should not be readily apparent to most subjects, thereby allowing for the expression of these more deeply seated attitudes.

The Problem.

The Authoritarian Personality (Adorno et al., 1950) consists of a relatively detailed explication of the HA's personality characteristics. On the basis of the factual information and/or the theoretical formulations presented in this book, investigators have attempted to devise experimental manipulations capable of differentiating, predictably, the behavior of the HA from that of the MA and the LA. Many such attempts have been both successful and congruent with the predictions made in The Authoritarian Personality (Adorno et al., 1950). On the other hand, a number of investigators have demonstrated that the relationship between behavior and F scale scores may well be curvilinear rather than linear as suggested by Adorno et al., (1950). The experimenter of the present investigation has suggested that whether the HA and the LA behave similarly or differently is a function of the environmental stimuli present and the scoring criteria defining the HA and the LA.

Three areas particularly relevant to the authoritarian syndrome were discussed in detail. In opposition to the predictions made in The Authoritarian Personality (Adorno et al., 1950), it was demonstrated that: (1) HAs do not always behave in a more hostile manner than LAs and MAs, (2) HAs do not always behave in a more hostile manner toward members of racial minority groups than do MAs or LAs, (3) HAs do not always conform more than MAs or LAs.

Rather than attempting to consider each point of dissention separately, it seems more reasonable to re-structure, at least temporarily, the conventional experimental approach in an effort to consider the authoritarian personality in the light of the holistic approach as exemplified by the work of Adorno's study (1950). The authoritarian personality is, after all, a personality type not a unitary trait, and hence represents a complex of interacting attitudes and behavioral propensities--all of which may contribute to a person's overt behavior.

It is suggested that studies which deal with only one characteristic of the authoritarian personality may quite easily commit the error of interpreting the differences between groups as solely a function of the manipulated variables and the particular facet of personality under consideration. However, such approaches dictate that many environmental variables must be held constant. The problem is, that since many aspects of any situation may have different meanings for persons achieving different F-scale scores, the level at which such a variable is held

constant may, itself, elicit more differences between groups than would the manipulated variable.

The present study has by no means, solved the above problem but has, at least, attempted to investigate the possible interactive effects of several theoretical characteristics of the authoritarian personality which are typically dealt with in an isolated manner. Briefly, the study has investigated the conformity behavior, the expression of hostility and the relationship between racial attitudes and behavior of persons scoring high, low, and moderately on the F scale. Thus, each subject (S) (HA, MA or LA) in the experiment had a partner who varied along two dimensions, representing either a Caucasian or an Indian in race and acting in either an insulting or neutral manner toward the subject. There were three main dependent variables: The S's personality evaluation of his partner, the difference between his evaluation of the person and of E, and the degree to which he conformed with his partner in a weight judging task.

Method

Subjects

The Ss for this experiment were selected from the male population of an introductory psychology course on the basis of their scores on two tests (Appendices A and B)' a 28-item California Fascist scale (F scale) and on a nine item anti-Indian scale (adapted from the anti-Negro scale of Adorno et al., 1950). These tests were part of the six-test battery which all the students in this course were required to complete during the first meeting of their psychology class.

Three groups of 32 males each, designated as either HA, MA or LA participated in the experiment. The HA and LA groups consisted of students who had scored both in the upper or lower third of the distribution of scores on the anti-Indian scale and the upper or lower 13% of the distribution of scores on the F scale, respectively. The MAs were selected from the students scoring both in the middle 10% of the F scale distribution, as calculated from the median, and in the middle third of the scores on the anti-Indian scale. The scores on the anti-Indian scale ranged from 9 to 45 with a median of 17. The median scores on the F scale for the HA, MA and LA groups were 91.3, 81.8 and 65.5 respectively. The ranges of scores for these groups were, respectively, 86 to 112, 78 to 84 and 41 to 70. The median scores on the anti-Indian scale for the HA, MA and LA groups were, respectively, 23, 17.9 and 12.7. The ranges of scores for these groups were, respectively, 19 to 45, 12 to 21 and 9 to 16.

Since all of the students enrolled in this course were required to participate in at least six psychological experiments during the school year, most persons who fulfilled the above scoring requirements agreed to participate in the experiment when asked to do so. To avoid any suspicion regarding the purpose of the experiment, the Ss were told that their names had been randomly selected from the population of psychology students.

Tasks

All Ss participated in four tasks in the course of the experimental session. These will be referred to as (1) the alphabet task, (2) the rating task, (3) the conformity task, and (4) the experiment evaluation task.

The alphabet task consisted of having the S say the alphabet backwards as quickly and correctly as possible. This task was always done first while the rating task and the conformity task were counterbalanced across all conditions. The experiment evaluation always followed the other three tasks.

The rating task consisted of the S's evaluating a peer (T) and then the experimenter (E) by completing two 16-item, 7-point, bi-polar, uni-dimensional adjective scales (Appendix C). The adjectives were selected from Osgood's (1957) book The Measurement of Meaning, on the basis of their high factor loadings on the evaluative factor. A few of the adjectives were also drawn from one of Osgood's scales concerned with minority group measurements.

In the conformity task, the S was required to compare the weight of a standard object with 12 other objects, one at a time, and tell the E the heavier object of each pair tested. All 13 objects weighed 2.110 grams but E told the S that the objects were all of a different weight. S's response was always given after the response of a confederate. The responses of the latter were identical over all experimental conditions, with the standard weight being called the heavier in six of the twelve trials. The order of the confederate's responses "number one (standard) heavier" was randomized over the twelve trials.

The experiment evaluation form consisted of a series of five questions, four of which were to be answered on a five-point, very agreeable to very disagreeable continuum (Appendix D). The fifth question required the S to answer either 'yes' or 'no' regarding his knowledge of T's identity. The first four questions dealt, respectively with (1) how S felt his performance on the alphabet task was influenced by T's behavior, (2) S's mood prior to entering the research room, (3) S's mood after saying the alphabet backwards, and (4) S's mood just before he began this experiment evaluation task.

Procedure

Each experimental session involved only one S, although with the use of a tape recorder he was led to believe that another S (T) in an adjoining room was also participating with him in the same experiment (Appendix E). S was seated at a table such that he was directly facing what appeared to be a large mirror. The E explained that this was a one-way mirror and that there was another S in the adjoining room who could

see directly into the experimental room. After turning up the volume on an intercom system which was directly in front of the S on the table at which he was seated, E seated himself behind a partition in the same room and proceeded to give the necessary instructions to S and T. The speaker in front of S, over which the voice of T was heard, was connected directly to a Model 8 Tannberg tape recorder which was controlled by E from behind his partition in the experimental room in which S was seated. The instructional set by E, initial statements from T and the nature of the tasks, discouraged any attempts on the part of S to converse with T.

Before the tasks, T was requested by E to state his height, weight, hair color, eye color and race. All characteristics remained the same for all conditions except the race of T which was Canadian-Indian in one-half the cases and Canadian-White in the other half. E wrote this information down (Appendix F) and gave it to S, telling him that he would need it for the personality rating task which he would be doing shortly.

As a rationale for the alphabet task, E explained to S and T that the effects of using different experimenters for the same study were under investigation. One of the Ss (always T) would be chosen to act as an experimenter and was asked to make up his own instructions for the assigned task with the goal of inducing the other S to do the task as efficiently as possible. In one-half the cases T simply gave instructions and did not speak again until S had either reached the letter 'H' or had struggled for one minute. This was called the

low stress condition (Appendix G). In the remaining cases, T introjected insulting statements concerning S's performance at any of the many pauses which one makes in attempting this task (Appendix H). The same cut-off points of either one minute or reaching the letter 'H' were used in this high stress condition.

In the personality rating task, which followed the alphabet task in one-half the cases, T and S were told that psychologists were attempting to determine the critical stimuli which people need in order to make a reasonably accurate personality judgment of strangers. T was to use all the normal cues since he could see through the glass but S was to use only those cues which T had provided earlier and E had written down. The Ss were told to deposit the ratings of their partner through the slot in the large, padlocked box which each were to have on their respective tables. After doing this they were to complete a similar rating for E since he had interacted with them both and this rating would, presumably, act as a standard to judge their ability to rate others.

For the conformity task, the Ss were told that they were to make a series of weight judgments as a study for the psychophysics department. On the table at which the S was seated there were 13 small, numbered canisters (Kodak film containers) each filled with lead and weighing 2.110 grams. The Ss were told that the set of canisters were the same in both rooms in terms of their identification numbers and weight differences and furthermore, that "each object was of a slight but noticeably different weight from any other object in the set" (Appendix E). As E

designated verbally a pair of objects to be tested the Ss were to pick them up and then state the number of the object which seemed to be the heavier of the pair. "To avoid my mixing up your responses," E instructed T to always give his response first. Conforming behavior on the part of S was designated as his giving a response identical to the response given previously by T.

After completing the above three tasks the Ss filled out the experiment evaluation form. The primary purpose of this form was to determine if S had been aware of the deception regarding the presence of T. This form was also supplemented by a brief interview with T. The data from one S was discarded.

After the experiment, all of the Ss that had been in the high stress conditions were informed of the nature of the deceptions and the reasons for them. The Ss were asked not to discuss the experiment with others and seemed quite willing to cooperate in this regard. Ss in the low stress control conditions were not informed of the deception of the completion of the experimental session but they were told that there would be a mimeographed summary (Appendix I) of the experiment on the table outside of the experimental room at the end of the school year. The Ss were agreeable to this idea since it was explained to them that such a summary would make it quite easy to complete the necessary forms for their instructors explaining the nature of the experiments in which they had participated.

Results

Analyses

Data were collected from the following eight dependent variables: conformity scores, rating of T, rating of E, the difference between the rating of T and E, and the four questions on the experiment evaluation form. The scores obtained on each variable were submitted to an analysis of variance. The Duncan's multiple range test (DMRT) was used as a post hoc method for the comparison of means. In addition, Pearson r correlation coefficients were calculated for the eight by eight matrix across various combinations of conditions.

Scoring

The personality rating scales were scored by assigning a score of one to a response on the extreme positive end of the seven-point scale and then assigning each successive point an increment of one such that a response on the extreme negative end of the scale was assigned a score of seven. These individual scores for each of the 16 adjectives were then summed to yield a single rating score for each person judged. Each S completed two such rating scales, one for T and the other for E. In addition to these two rating scores a difference score was calculated by subtracting the smaller of the two ratings from the larger.

The conformity task was scored by assigning S a score of one each time his response was identical to the response given just

previously by T. S was assigned a score of zero for each time his response differed from the previous response of T. These scores were then summed over the first 11 trials. S's response on trial 12 was not used in order to avoid a possible distortion of the total conformity score by a finish effect.

The experiment evaluation form consisted of four questions which were answered on a five-point scale. A score of one was assigned to a response at the extreme positive end of the scale with the successive points increasing by increments of one such that a response on the extreme negative end of the scale was assigned a score of five. In the analysis, each of these four questions were identified by their question number and analyzed separately.

Personality rating scores

The ratings of T and E by each S were submitted to a split plot design analysis of variance summarized in Table 1. The significant ($F = 12.91$, $df = 1 \& 72$, $p < .01$) main effect of stress indicates that the manipulation of stress was effective. That is, the Ss gave more negative ratings when they were insulted by T (high stress, $\bar{X} = 51.8$) than when they were not insulted (low stress, $\bar{X} = 41.9$). The significant ($F = 55.84$, $df = 1 \& 72$, $p < .01$) main effect of ratings indicate that S gave more negative ratings to T ($\bar{X} = 53.4$) than to E ($\bar{X} = 40.2$). The significant ($F = 18.94$, $df = 1 \& 72$, $p < .01$) stress X rating interaction indicates that, while the rating of T became considerably more negative in the high stress as compared to the low stress condition,

Table 1

Summary of the Analysis of Variance of Personality Ratings

of the "Other" Subject and the Experimenter

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	829.5724	2	414.7862	
2: Stress	4690.6279	1	4690.6279	12.91**
3: Race	2.7552	1	2.7552	
4: Order	678.7547	1	678.7547	1.8712
1 X 2	755.6370	2	377.8185	
1 X 3	2060.4478	2	1030.2239	2.8402
1 X 4	535.6984	2	267.8492	
2 X 3	447.1312	1	447.1312	
2 X 4	441.0478	1	441.0478	
3 X 4	18.1305	1	18.1305	
1 X 2 X 3	381.1345	2	190.5672	
1 X 2 X 4	591.9680	2	295.9840	
1 X 3 X 4	59.5728	2	29.7864	
2 X 3 X 4	536.6714	1	536.6714	
1 X 2 X 3 X 4	12.4692	2	6.2346	
Error (a)	26115.8472	72	362.7201	
5: Rating	8177.1247	1	8177.1247	55.84*
1 X 5	1052.8895	2	526.4448	3.59*
2 X 5	2767.9241	1	2767.9241	18.90**
3 X 5	178.2584	1	178.2584	
4 X 5	148.7587	1	148.7587	
1 X 2 X 5	195.2793	2	97.6397	
1 X 3 X 5	18.0073	2	9.0037	
1 X 4 X 5	166.0070	2	83.0035	
2 X 3 X 5	61.8789	1	61.8789	
2 X 4 X 5	2.2964	1	2.2964	
3 X 4 X 5	106.5028	1	106.5028	
1 X 2 X 3 X 5	16.6987	2	8.3494	
1 X 2 X 4 X 5	497.2815	2	248.6408	
1 X 3 X 4 X 5	122.6384	2	61.3192	
2 X 3 X 4 X 5	13.5469	1	13.5469	
1 X 2 X 3 X 4 X 5	499.0310	2	249.5155	1.7031
Error (b)	10548.3600	72	146.5050	

*Significant at .05 level

**Significant at .01 level

the rating of E became only slightly more negative as stress increased (Fig. 1). Table 1 also indicates that the authoritarianism X rating interaction was significant ($F = 3.59$, $df = 1 \& 72$, $p < .05$). Over all conditions the HA, MA, and LA tended to have similar rating scores for E but they differed considerably in their rating scores for T. T was rated most negatively by the LA and most positively by the HA while the rating of the MA was intermediate to these extremes (Fig. 2).

A DMRT was calculated for the stress X rating and the authoritarian X rating cell means and is summarized in Tables 2 and 3 respectively. Regarding the means for the stress X rating interaction, it was demonstrated that the rating of T and E differ significantly ($p < .05$) under the high level of stress but not under the low level of stress. For the authoritarian X rating means, the ratings for T were significantly ($p < .05$) different from the ratings of E for all levels of authoritarianism. Furthermore, the LA rating of T was significantly ($p < .05$) more negative than the rating of T or E by the MA or the HA.

A separate analysis of variance was calculated for the ratings of T alone and of E alone. These analyses are summarized in Tables 4 and 5 respectively. There were only two significant findings in these two analyses. The stress main effect ($F = 35.50$, $df = 1 \& 72$, $p < .01$) and the authoritarianism main effect ($F = 4.22$, $df = 1 \& 72$, $p < .05$) were significant for the rating of T.

Difference Scores

The difference between Ss' ratings of T and E provided an indication of the degree to which he perceived two strangers as possessing similar or different personality characteristics.

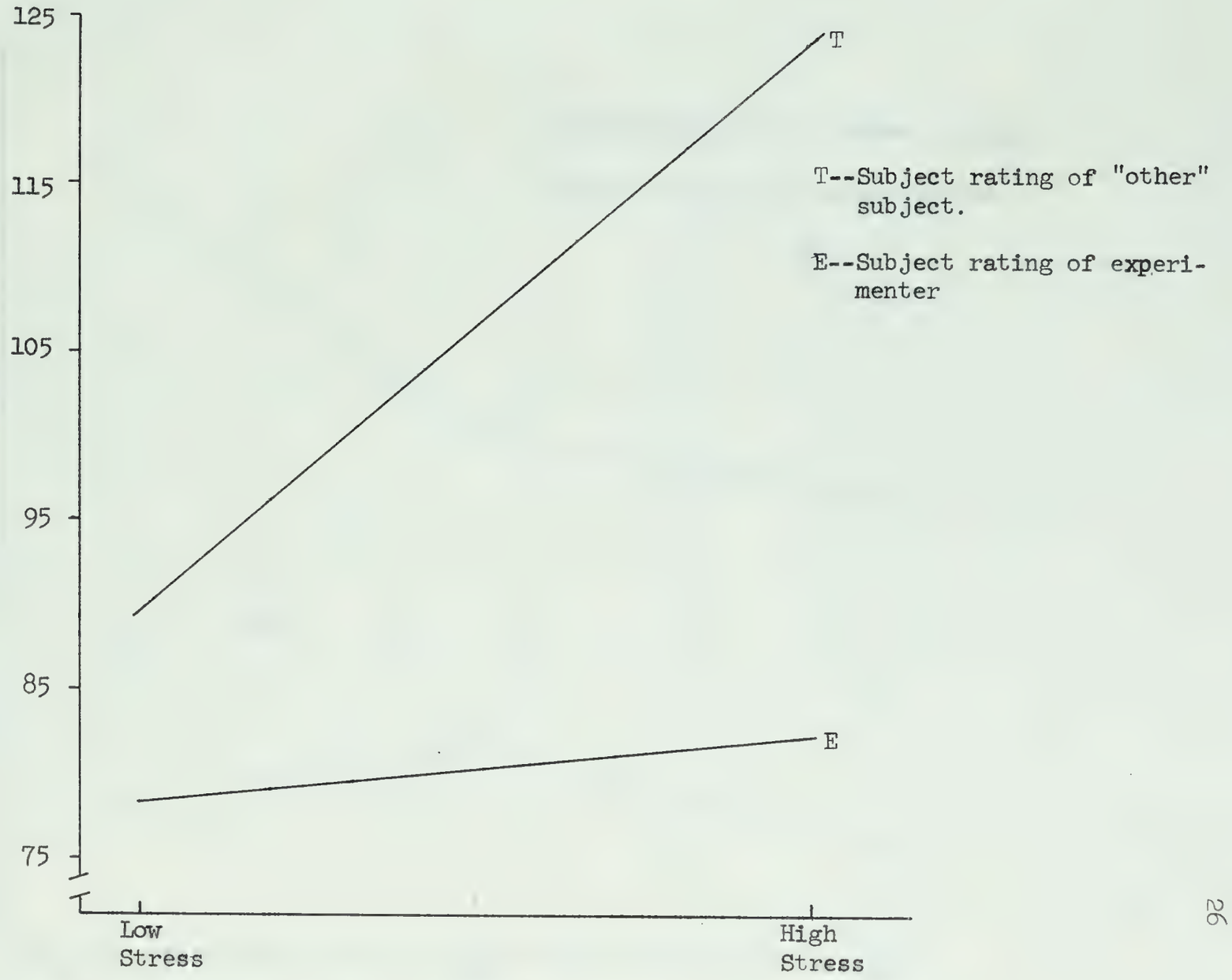

Fig. 1. Stress X Rating Interaction of Personality Rating Scores

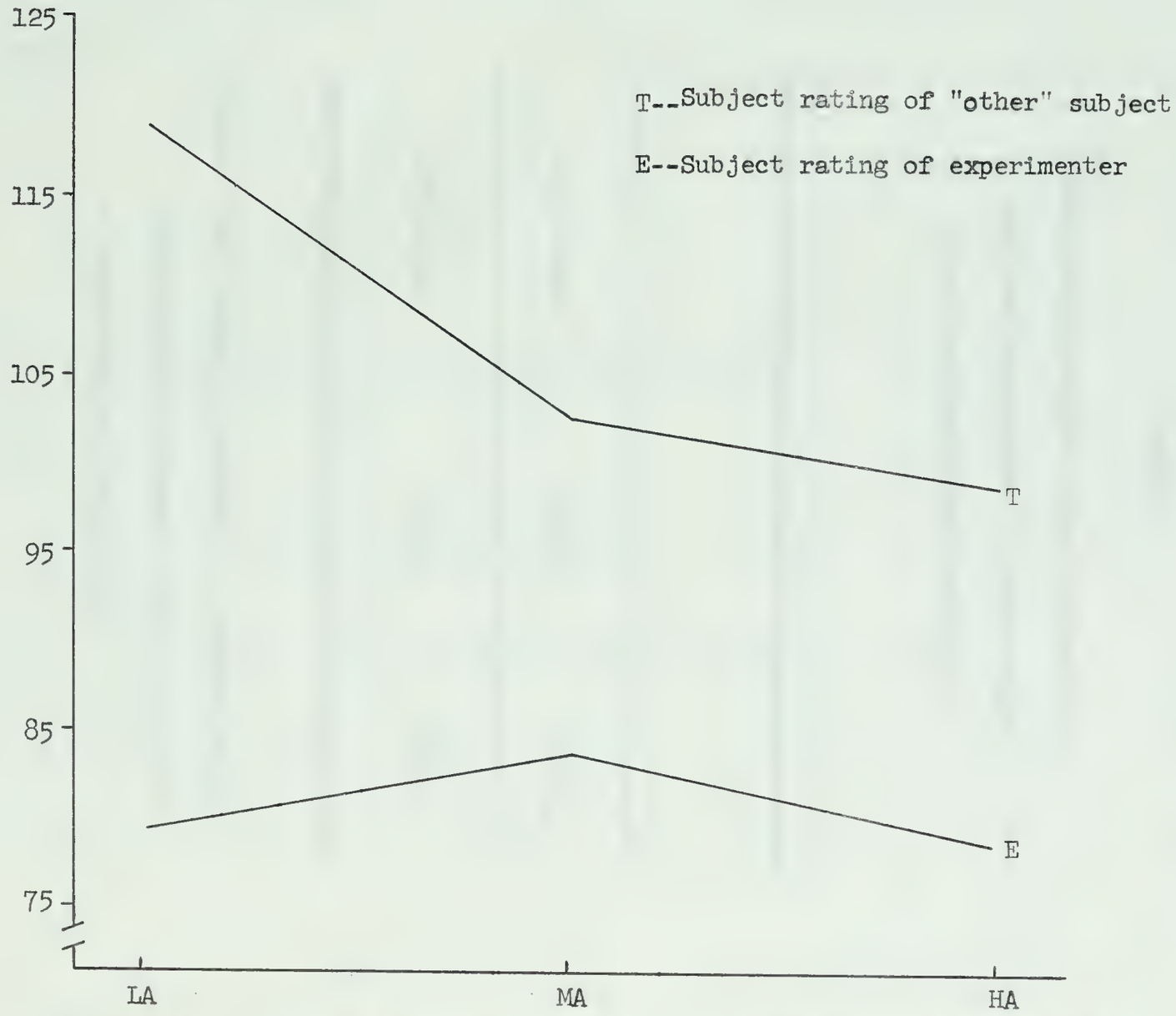

Fig. 2. Authoritarian X Rating Interaction of Personality Rating Scores

Table 2

Mean Rating of the "Other" Subject (T) and the Experimenter (E) under High Stress and Low Stress Conditions

	T	E
High Stress	124.21_a	82.92_{bc}
Low Stress	89.25_b	78.33_c

Note: Cells having a subscript in common are not significantly different at the .05 level by Duncan Multiple-Range test.

Table 3

High, Low and Moderate Authoritarians
Mean Ratings of the "Other" Subject (T)
and the Experimenter (E)

	T	E
LA	118.63_a	79.31_c
MA	102.56_b	83.94_c
HA	99.00_b	78.63_c

Note: Cells having a subscript in common are not significantly different at the .05 level by Duncan Multiple-Range test.

Table 4

Summary of the Analysis of Variance of Personality Ratings of the "Other" Subject

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	1748.8954	2	874.4477	4.22*
2: Stress	7332.5081	1	7332.5081	35.50**
3: Race	68.3437	1	68.3437	
4: Order	731.5104	1	731.5104	3.53
1 X 2	325.8976	2	162.9488	
1 X 3	899.3127	2	449.6564	2.17
1 X 4	643.8962	2	321.9481	
2 X 3	420.8448	1	420.8448	
2 X 4	189.8451	1	189.8451	
3 X 4	106.2605	1	106.2605	
1 X 2 X 3	120.5615	2	60.2808	
1 X 2 X 4	1040.8110	2	520.4055	2.51
1 X 3 X 4	106.3955	2	53.1978	
2 X 3 X 4	189.8433	1	189.8433	
1 X 2 X 3 X 4	275.0629	2	137.5315	
Error	14890.0392	72	206.806	

*Significant at .05 level

**Significant at .01 level

Table 5

Summary of the Analysis of Variance of Personality Ratings of the Experimenter

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	133.5625	2	66.7812	
2: Stress	126.0417	1	126.0417	
3: Race	112.6667	1	112.6667	
4: Order	96.0000	1	96.0000	
1 X 2	625.0208	2	312.5104	
1 X 3	1179.1458	2	589.5729	1.95
1 X 4	57.8125	2	28.9063	
2 X 3	88.1667	1	88.1667	
2 X 4	253.5000	1	254.5000	
3 X 4	18.3750	1	18.3750	
1 X 2 X 3	277.2709	2	138.6354	
1 X 2 X 4	48.4375	2	24.2188	
1 X 3 X 4	75.8125	2	37.9063	
2 X 3 X 4	360.3750	1	360.3750	
1 X 2 X 3 X 4	236.4375	2	118.2188	
Error		72	302.420	

The summary of the analysis of variance for the difference scores appears in Table 6. The significant ($F = 3.32$, $df = 1$ & 72, $p < .01$) stress main effect indicates that, on the whole, the Ss reported a greater difference between the personalities of T and E in the high stress as compared to the low stress condition. Although this change in the difference scores could theoretically be due to changes in the rating of either T or of E or both together, the table of means for the stress X rating interaction (Table 2) indicates that the rating of T changed more over the different stress conditions than did the rating of E. Furthermore, the correlation (Appendix J) between the rating of T and the difference scores was .78 while the correlation between E and the difference scores was approximately zero suggesting, again, that the increase of difference scores was related to an increase in the negative rating of T.

The significant ($F = 3.24$, $df = 2$ & 72, $p < .05$) authoritarianism X stress X order interaction demonstrated that in order one the HA, MA and LA had low, approximately equal difference scores under low stress but these scores tended to increase and diverge under high stress conditions. However, in order two these points of concurrence and divergence were essentially reversed, such that all scores were similar and relatively high under the high stress condition but smaller and diverging under the low stress condition. Over both order conditions the divergence in the magnitude of difference scores for the three levels of authoritarianism were identical. That is, the LA perceived the greatest difference between T and E while the HA perceived the

Table 6

Summary of the Analysis of Variance

of the Difference Scores

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	809.0206	2	404.5103	2.32
2: Stress	5781.5087	1	5781.5087	33.21**
3: Race	114.8437	1	114.8437	
4: Order	162.7604	1	162.7604	
1 X 2	171.8970	2	85.9485	
1 X 3	123.9376	2	61.9688	
1 X 4	63.5209	2	31.7604	
2 X 3	75.2614	1	75.2614	
2 X 4	15.8445	1	15.8445	
3 X 4	86.2604	1	86.2604	
1 X 2 X 3	60.3950	2	30.1975	
1 X 2 X 4	1131.8118	2	565.9059	3.24*
1 X 3 X 4	243.2708	2	121.6354	
2 X 3 X 4	128.3432	1	128.3432	
1 X 2 X 3 X 4	528.8130	2	264.4065	
Error		72	174.2460	

*Significant at .05 level

**Significant at .01 level

smallest difference. The MA was again, in an intermediate position (Fig. 3).

The means of the authoritarianism X stress X order interaction appear in Table 7. A DMRT was calculated for these means and it was demonstrated that in the order one condition the LA and the MA both have significantly ($p < .05$) greater difference scores under high stress as compared to the low stress condition. However, in the order two condition only the HA had a significantly ($p < .05$) greater score in the high stress as compared to the low stress condition.

Conformity Scores

The summary of the analysis of variance (Table 8) indicates that the stress X order X race interaction was significant at the ($F = 11.67$, $df = 1$ & 72, $p < .01$) level and the authoritarianism X stress X race X order interaction was significant at the ($F = 3.50$, $df = 2$ & 72, $p < .05$) level. The form of the race X stress X order interaction was such that in order one the conformity scores with the Caucasian partner decreased as stress increased while the conformity score with the Indian partner increased as stress increased. However, in order two, the conformity score with the Caucasian partner increased as stress increased while the conformity score with the Indian partner decreased as stress increased (Fig. 4).

The form of the authoritarianism X race X stress X order interaction was such that in order one when the partner was an Indian the conformity behavior of the MA increased as stress increased while the LA and HA showed little change in behavior as a function of increasing

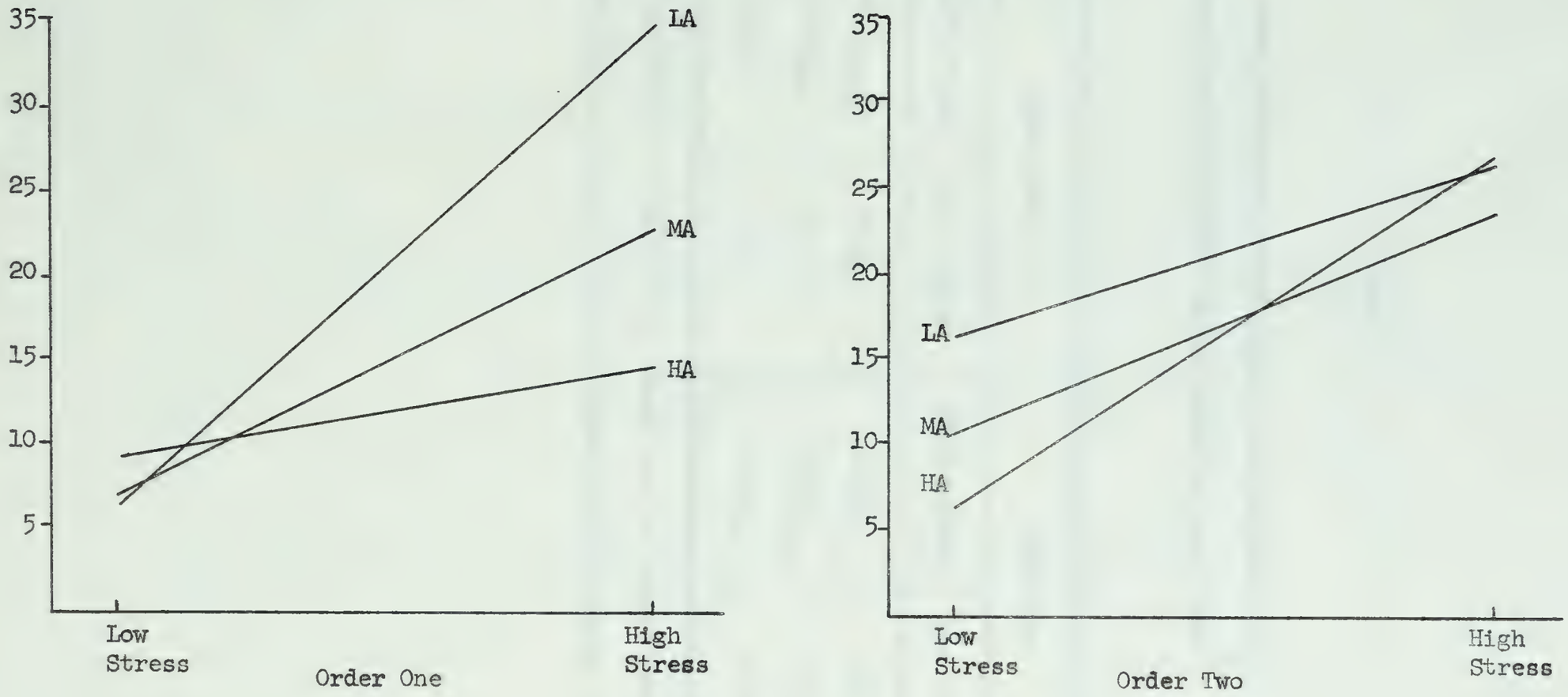

Fig. 3. Authoritarianism X Stress X Order Interaction of Difference Scores.

Table 7

Mean Difference Scores under High and Low Stress for Each Authoritarian Group in Each Order

	Order One		Order Two	
	High Stress	Low Stress	High Stress	Low Stress
HA	14.13_{bcd}	9.0_{cd}	26.63_{ab}	6.0_{d}
MA	22.38_{abc}	6.75_{d}	23.50_{abc}	10.13_{cd}
LA	34.53_{a}	6.25_{d}	26.25_{ab}	16.13_{bcd}

Note: Cells having a subscript in common are not significantly different at the .05 level by Duncan Multiple-Range Test.

Table 8

Summary of the Analysis of Variance

of the Conformity Scores

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	10.6875	2	5.3438	2.50
2: Stress	.0938	1	.0938	
3: Race	.2604	1	.2604	
4: Order	.0937	1	.0937	
1 X 2	.1875	2	.0938	
1 X 3	7.5208	2	3.7604	
1 X 4	10.6875	2	5.3438	
2 X 3	.0104	1	.0104	
2 X 4	.8438	1	.8438	
3 X 4	.2604	1	.2604	
1 X 2 X 3	10.0208	2	5.0104	
1 X 2 X 4	.4375	2	.2188	
1 X 3 X 4	7.2708	2	3.6354	1.70
2 X 3 X 4	25.0104	1	25.0104	11.67**
1 X 2 X 3 X 4	15.0208	2	7.5104	3.50*
Error	154.2240	72	2.142	

*Significant at .05 level

**Significant at .01 level

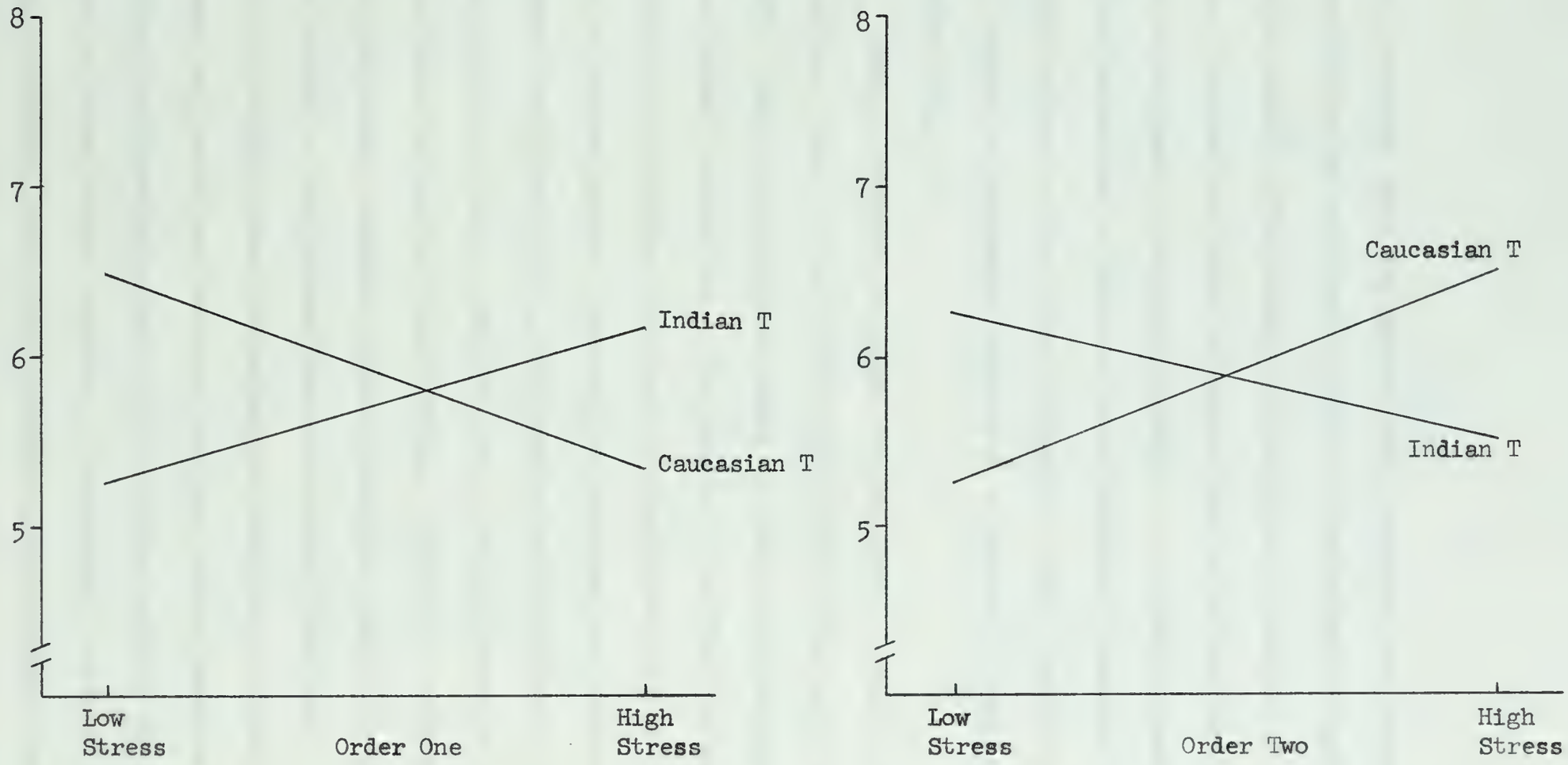

Fig. 4. Race X Stress X Order Interaction of Conformity Scores.

stress. However, when the partner was a Caucasian the conformity behavior of the MA decreased as stress increased while, again, the LA and HA showed little change in behavior as a function of increasing stress. In order two, when the partner was an Indian, the LA and MA tended to decrease in conformity behavior as stress increased but when the partner was a Caucasian their conformity behavior showed a slight increase as the stress increased. Again, the HA showed little change in conformity behavior as a function of the increase in stress (Fig. 5).

Table 9 contains the means for the stress X race X order interaction. None of these differences between means were significant by DMRT. Table 10 contains the means for the authoritarianism X stress X race X order interactions. The results of the DMRT indicate that in the order two conditions there were no significant ($p < .05$) differences within or between groups. However, in the order one condition, the MA conformed significantly ($p < .05$) more in the high stress, Indian partner condition than in the low stress, Indian partner or high stress, Caucasian partner condition and, conversely, conformed more in the low stress, Caucasian partner condition than in the low stress Indian partner or high stress Caucasian partner condition. Furthermore, the HA in the high stress Indian partner condition in order one, and in order two, the MA and the LA in the high stress Caucasian partner condition, conformed more than the LA in order one with an Indian partner in either stress condition. In addition, the LA in order one, Caucasian partner, high stress condition also conformed significantly

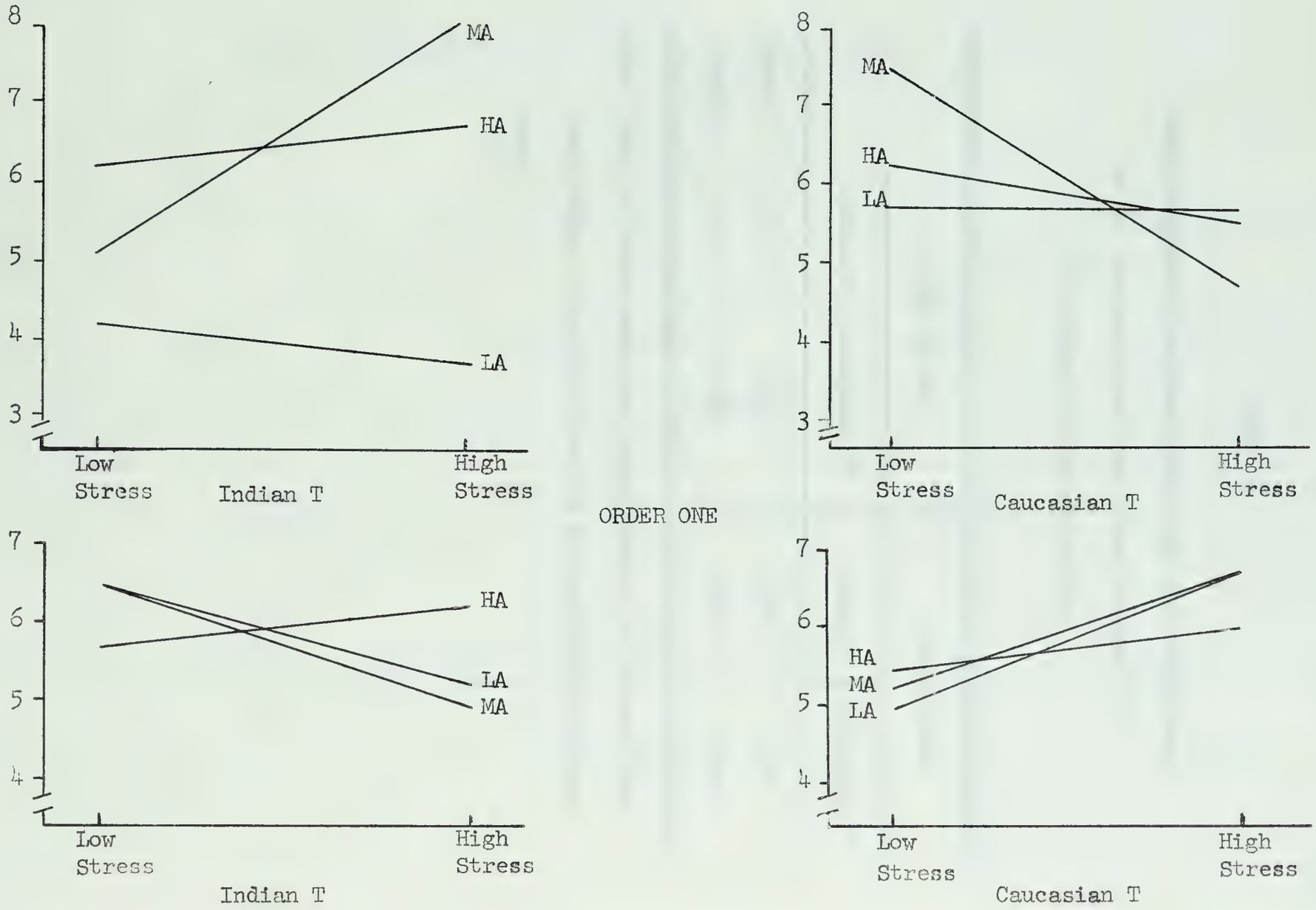

Fig. 5. Authoritarianism X Race X Stress X Order Interaction of Conformity Scores

Table 9

Mean Conforming Response Under High and Low Stress to the Caucasian and the Indian Partner (T) for Order One and Order Two

	High Stress		Low Stress	
	Indian T	Caucasian T	Indian T	Caucasian T
Order 1	6.17	5.33	5.25	6.50
Order 2	5.50	6.50	6.25	5.25

Note: None of these means are significantly different from each other at the .05 level by Duncan Multiple-Range Test.

Table 10

Mean Conforming Responses Under High and Low Stress to the and the Indian Partner (T) in Order One and Order Two by Each Authoritarian Group

	Order One				Order Two			
	Indian T		Caucasian T		Indian T		Caucasian T	
	High Stress	Low Stress	High Stress	Low Stress	High Stress	Low Stress	High Stress	Low Stress
HA	6.75_{abc}	6.25_{abcd}	5.5_{bcde}	6.25_{abcd}	6.25_{abcd}	5.75_{abcde}	6.0_{abcde}	5.5_{bcde}
MA	8.0_{a}	5.25_{bcde}	4.75_{cde}	7.5_{ab}	5.0_{bcde}	6.5_{abcd}	6.75_{abc}	5.25_{bcde}
LA	3.75_{e}	4.25_{de}	5.75_{abcde}	5.75_{abcde}	5.25_{bcde}	6.5_{abcd}	6.75_{abc}	5.0_{bcde}

Note: Cells having a subscript in common are not significantly different at the .05 level by Duncan Multiple-Range Test.

($p < .05$) more than the LA and the HA of order two in both the high stress Indian partner and low stress Caucasian partner conditions.

Experiment Evaluation

An analysis of variance was calculated from the responses to each of the four questions on this evaluation form. Summaries of these four analyses will be found in Tables 11, 12, 13, and 14. There were no significant findings in the analyses of responses to questions one, three and four.

For question two, the order main effect was significant ($F = 7.18$, $df = 1 \& 72$, $p < .05$) with the mean response in order one being 2.50 as compared to a mean response of 2.15 in order two. The race X stress interaction was also significant ($F = 7.18$, $df = 1 \& 72$, $p < .05$). Table 15 contains the means for the race X stress interaction. The question asked the S to describe his mood just before entering the research room. For the order main effect the response was more agreeable in the first order than in the second order. In the race X stress interaction, the response under low stress was more disagreeable when T was Caucasian than when T was an Indian. However, under the high stress condition, the response was more negative when T was Indian than when T was Caucasian (Fig. 6).

Correlations

Pearson r correlation coefficients were calculated between all pairs of dependent measures (Appendix J). There were eight such measures: the conformity score, the rating of E, the rating of T, the

Table 11

Summary of the Analysis of Variance of Responses on Question One[1] of the Experiment Evaluation

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	.3958	2	.1979	
2: Stress	2.0417	1	2.0417	1.95
3: Race	1.0417	1	1.0417	
4: Order	1.0417	1	1.0417	
1 X 2	.1458	2	.0729	
1 X 3	3.5208	2	1.7604	
1 X 4	2.0208	2	1.0104	
2 X 3	.1667	1	.1667	
2 X 4	.6667	1	.6667	
3 X 4	.1667	1	.1667	
1 X 2 X 3	1.0208	2	.5104	
1 X 2 X 4	3.2708	2	1.6354	
1 X 3 X 4	1.8958	2	.9479	
2 X 3 X 4	.3750	1	.3750	
1 X 2 X 3 X 4	4.5625	2	2.2812	2.18
Error	75.5000	72	1.0490	

[1]Performance on alphabet task affected by behavior of T?

Table 12

Summary of Analysis of Variance of Responses on

Question Two[1] of the Experiment Evaluation

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	.3958	2	.1979	
2: Stress	.0938	1	.0938	
3: Race	.8438	1	.8438	
4: Order	3.0104	1	3.0104	5.74*
1 X 2	1.1875	2	.5938	
1 X 3	.0625	2	.0313	
1 X 4	.0208	2	.0104	
2 X 3	3.3760	1	3.3760	7.18*
2 X 4	.0938	1	.0938	
3 X 4	.5104	1	.5104	
1 X 2 X 3	.2708	2	.1354	
1 X 2 X 4	.0625	2	.0313	
1 X 3 X 4	.0208	2	.0104	
2 X 3 X 4	.2604	1	.2604	
1 X 2 X 3 X 4	.6458	2	.3229	
Error	37.7510	72	.5240	

[1]Mood before entering research room?

*Significant at .05 level

Table 13

Summary of the Analysis of Variance of Responses on Question Three[1] of the Experiment Evaluation

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	2.0208	2	1.0104	
2: Stress	1.5000	1	1.5000	
3: Race	2.0417	1	2.0417	1.66
4: Order	.6667	1	.6667	
1 X 2	1.3125	2	.6563	
1 X 3	1.2708	2	.6354	
1 X 4	2.0208	2	1.0104	
2 X 3	1.0417	1	1.0417	
2 X 4	.6667	1	.6667	
3 X 4	2.0417	1	2.0417	1.66
1 X 2 X 3	3.1458	2	1.5729	
1 X 2 X 4	1.8958	2	.9479	
1 X 3 X 4	1.2708	2	.6354	
2 X 3 X 4	.3750	1	.3750	
1 X 2 X 3 X 4	.0625	2	.0313	
Error	88.4990	72	1.2290	

[1]Mood after saying alphabet backwards?

Table 14

Summary of the Analysis of Variance of Responses on Question Four[1] of the Experiment Evaluation

Source of Variation	Sum of Squares	df	Mean Square	F
1: Authoritarianism	1.3125	2	.6563	
2: Stress	1.2604	1	1.2604	2.28
3: Race	1.7604	1	1.7604	3.19
4: Order	.0938	1	.0938	
1 X 2	1.0208	2	.5104	
1 X 3	.2708	2	.1354	
1 X 4	1.5625	2	.7813	
2 X 3	.5104	1	.5104	
2 X 4	1.2604	1	1.2604	2.28
3 X 4	.8438	1	.8438	
1 X 2 X 3	.6458	2	.3229	
1 X 2 X 4	1.0208	2	.5104	
1 X 3 X 4	2.4375	2	1.2188	2.21
2 X 3 X 4	.0104	1	.0104	
1 X 2 X 3 X 4	1.3958	2	.6979	
Error	397521	72	.5520	

[1]Mood just before answering this questionnaire?

Table 15

Mean Response on Question Two of Experiment Evaluation to a Caucasian T and to a White T under High Stress and Low Stress Conditions

	High Stress	Low Stress
Caucasian	2.29	2.37
Indian	2.41	2.20

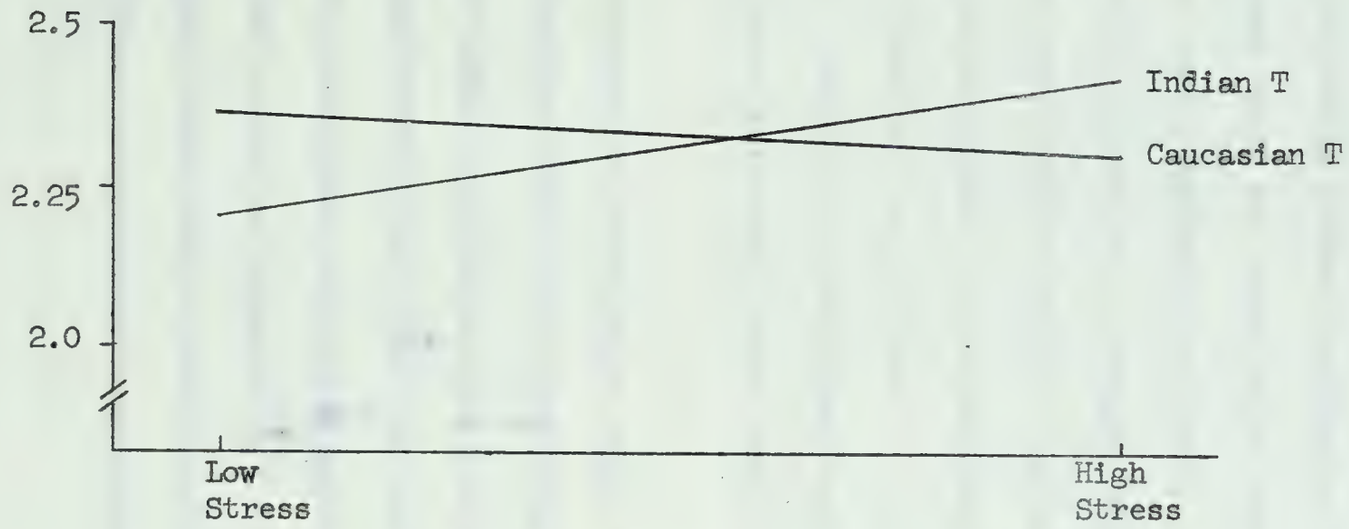

Fig. 6. Race X Stress Interaction of Responses on Question Two of the Experiment Evaluation Form.

difference score, and the four individual responses to the questions on the experiment evaluation form.

The expected relationship between conforming behavior and the rating of T was not evident until the correlation coefficients were calculated separately for each combination of stress, race and order (Appendix K). When T was an Indian the conformity behavior increased as the rating of T became more positive when in the high stress, but not when in the low stress condition. In the high stress conditions the correlations were .65 and .62 ($p < .05$ when $r = .576$) for order one and two respectively. But, in the low stress conditions the correlations did not differ significantly from zero (-.09 and -.35 respectively).

When T was a Caucasian the correlations were .63 in the low stress order one conditions and -.66 in the high stress, order one conditions. On the other hand, the correlations were approximately zero (-.01 and -.09 respectively) in all order two conditions.

Correlation coefficients were calculated across many different combinations of independent variables (Appendix L). Other then the correlations discussed above there were no other findings which were both statistically significant and meaningful in terms of the present study.

Discussion

Preliminary to the interpretation of the above results, a number of qualifications should be cited which will assist the reader in understanding the author's approach. First, the study was exploratory and hence, called for a post hoc analysis of the results. Therefore, any hypothesis which fits the data may, in all logicality, be included in the interpretation. However, only interpretations have been used which have been supported by previous research. An attempt was also made to deal with integrative interpretations as much as possible, excluding those which would be applicable in one condition but incompatible with the data in another condition.

Personality Rating

The finding that ratings of T were more negative than the ratings of E was expected since T acted in an insulting manner in one-half of the conditions while E acted in a neutral manner in all conditions. Furthermore, S always rated T before E, thus, according to the catharsis theory of hostility reduction, S would release his hostility on the first person rated (T). According to this notion, the subsequent rating of E is more positive since the hostile feelings have been reduced in attributing negative characteristics to T.

The data indicated that the manipulation of stress was effective, at least with regard to the personality ratings. The rating of T was considerably more negative when T acted in an insulting (high stress) rather than a neutral manner (low stress). However, the

rating of E, who acted in a neutral manner in both the high and low stress conditions, remained about the same, regardless of the behavior of T.

Adorno's (in Adorno et al., 1950) prediction that the HA expresses hostility more readily than either the MA or the LA was not borne out by the data. Neither was it in accord with Rokeach's (1960) implied prediction that the LA and HA would be more similar in their behavior to one another than either would be to the MA. In fact, the LA attributed more negative ratings to T than did either the MA or the HA in that order. Seigel (1956) demonstrated that the LA expressed more hostility than the HA when the hostility was measured on a projective test. In the present study, the personality rating task may have at least one important point in common with a projective test--the fact that the Ss are not directly aware of the hostility implicit in their responses in a seemingly neutral task. The findings of the present study indicate that sometimes a defining criterion of a category, such as Adorno's hostile HA may simply reflect the situational variables under which a phenomena was originally observed. Studies supporting the concept of the hostile HA have typically used overt measures of hostility while the present study and Siegel's (1956) study used covert measures of hostility. The importance of situational variables has also been demonstrated by Abrams (1965) and Bounds (1964). These researchers also found that the LA was more hostile than the HA if the humanitarian ideals of the LA were challenged.

The rating of E, on the other hand, was approximately the same for all levels of authoritarianism. This rating provided a type of base-line, demonstrating that there do not seem to be any intrinsic differences in the way that HAs, MAs and LAs rate neutral individuals. Of course, the limitation on this base-line is the fact that E was an authority figure and thus these ratings may not be truly representative of those which might be given to a peer under otherwise identical circumstances.

Difference Scores

A number of researchers have suggested that there are individual differences in the way people tend to categorize environmental stimuli, and that these differences may be related to their respective F scale scores (Berkowitz, 1960; Helson, 1964; Rule, 1966). Categorization in this sense refers to the person's tendency to classify various stimuli as being equivalent (same category) or different (different category). Thus, a person using narrow categories tends to perceive many differences in a set of stimuli while a person using broad categories tends to see many similarities in the same set of stimuli.

The data indicated that S rated T and E more differently in the high stress than in the low stress condition. This increase in the difference score under high stress was primarily attributable to an increased negative rating of T. The correlation, over all conditions, between the rating of T and the difference score was

0.78 while the correlation between the rating of E and the difference score was approximately zero. The difference scores do not contribute a great deal of additional critical information not contained in the less complex analysis of the rating scores discussed above. Nevertheless, the following discussion is of interest because of the theoretical relevance such scores bear to the concept of authoritarianism.

The interaction of authoritarianism, stress and order will be discussed primarily in terms of the effect which the order of task presentation had on the S's interpretation of the different stress conditions. In order one (conformity task prior to rating task), the results follow from the analyses of Adorno concerning the expected differences in the expression of hostility by the HA and the LA. That is, the HA is supposed to express hostility in a diffuse, alogical manner while the LA is supposed to channalize the expression of such impulses more effectively and logically. Thus, in the order one, high stress condition, the above expectations were confirmed, with the LA categorizing narrowly, the HA categorizing broadly and the MA behaving in an intermediate manner. However, in the low stress condition of this order, there were no differences in the categorization behavior of the HA, MA, or LA groups. Although the Adorno group (1950) made no clear-cut predictions in such low stress conditions, Brown (1953) has demonstrated that the HAs and LAs do not exhibit differences in cognitive style, as measured on a problem solving test, unless the testing conditions are made ego-involving. The

conditions of Brown's study were, of course, different from the present experiment, but the rigidity in thought processes, which he found would discriminate the HA from the LA only when they are under stressful conditions, seems analogous to the presence and absence of differential categorization behavior as expressed in the above findings.

However, in order two (rating task prior to conformity task) the differential categorization behavior was noted only under the low stress conditions. The differences were in the same directions as in order one, with the HAs categorizing broadly, the LAs categorizing narrowly, while the MAs behaved in an intermediate manner. In the high stress condition there were only negligible differences in the behavior of the HA, MA, and LA groups. The differences in behavior between order one and order two may be attributable to the fact that in order two S rated T and E immediately after completing the alphabet task. Although the Ss were told that the alphabet task was not a measure of intelligence, (see instructions, Appendix E) many of the Ss commented on their poor performance either after or during the experiment. Since both T and E acted in a neutral manner during the S's stumbling attempts to perform the alphabet task, the Ss could blame their poor performance only on themselves. The subsequent ratings of T and E may, then, have served as an outlet for this arousal, resulting in the differential categorization behavior. On the other hand, in the order one condition the conformity task was interpolated between the alphabet task and the rating task. This

interpolated task not only provided a lapse in time between the alphabet task and the rating task but it also acted as a distractor for the aroused S. Such factors could allow for the dissipation of the original arousal, thereby eliminating the possibility of differential categorization behavior. In the high stress condition of order two, the Ss rated T immediately after being insulted by him during the foregoing task. Since S's poor performance on the alphabet task could easily be attributed to T's behavior, the negative ratings given T may be more representative of an objective rating rather than the expression of personal hostility. This would explain the absence of differential categorizing behavior in order two. However, in order one, high stress conditions, the ratings of T and E followed S's performance of the conformity task. In this case S was exposed to an additional sample of T's behavior. Instead of continuing to act like a "wise guy" or a fool, T behaved in a properly, task-oriented and mature manner throughout the conformity task. Such behavior may have been arousing because it would not be congruent with S's attributing his poor performance on the alphabet task to the fact that his partner (T) was an irresponsible and incompetent person. In addition, S had to participate with T in the conformity task although it may be presumed that he did not like T. Thus, in this case the conformity task presented an extra bit of behavior which may have been incompatible with S's preliminary unstated evaluation of T, thereby weakening the mechanism by which S disavowed responsibility for his performance on the alphabet task. It may also

have increased S's arousal since it is a generally accepted fact that Ss prefer not to participate in experiments with persons they dislike. Thus, differential categorization appeared in order one but not in order two.

Conformity Scores

The conformity task was designed in part, to serve as an indirect evaluative measure of T. That is, there was no correct answer for any trial and the stimuli were not value-loaded or open to different interpretations as a function of the past experience of S. Although T appeared to be more incompetent in the high stress than in the low stress condition, it has been demonstrated that a partner's failure or success on a prior task does not affect a S's magnitude of conforming behavior unless the prior task was directly related to the conformity task (Croner and Willis, 1961).

Since the correlations between ratings and conformity scores were far from perfect, the question arises as to which is the best evaluative measure. Presumably, the S was not as aware of the fact that he was evaluating T when engaged in the conformity task as compared to the rating task. Furthermore, there are probably many other influences on such behavior which contaminate the S's response so that the final result of either of these tasks cannot be considered as representative of a pure evaluative measure.

Although the stress X rating X order interaction was significant, it will not be discussed since the authoritarianism X race

X order X stress interaction supercedes it. Before considering the many conditions in the latter interaction, a few preliminary overview statements will be presented in an attempt to bring out the important points:

1. The conformity behavior of the HA remained relatively stable despite changes in the levels of order, race or stress.
2. In order one, the MAs demonstrated extreme changes in conformity behavior as stress and race were varied.
3. In order one, the LAs exhibited extreme changes in conformity behavior as race changed.
4. In order two, the HA, MA, and LA groups acted more similarly to one another than in order one.

In accounting for this interaction it must be recalled that the relationship between F scale scores and prejudice was not based on an individual's interpersonal behavior with members of disliked minority groups. That is, the HA may dislike Indians in general while expressing positive feelings toward a particular Indian. This tendency to discriminate the Indian partner from the concept of "Indians in general" was particularly likely in the present study because the Indian was a college student enrolled in the same introductory psychology class as S. These criteria may not only take T from the 'typical' Indian category but they may put him in S's own category. According to Rokeach's theory (1960) this would imply a similarity of beliefs between T and S which would be more important regarding their mutual attractiveness than the race differences.

The LA demonstrated a great deal of variability in conformity behavior from order one to order two when T was an Indian. It may be the case that the extremely low F scale scorers, as used in this study, actually are racially prejudiced. Perhaps, as a result of early training such individuals have internalized such incompatible values as racial prejudice and the humanitarian concept of the equality of all men. If, for some reason, the concept of social prejudice could not be accepted consciously because of the anxiety resulting from the conflict of values, the person may overreact in his expression of the usual liberal values. This ego defense mechanism, called reaction formation, would account for the LAs behavior. In order one, the LA conformed less with the Indian than with the white T. The lack of conformity with the Indian T would reflect S's unconscious attitudes toward Indians. However, in order two, S first made an evaluation of T thus bringing the concept of "Indian . . . I'm not prejudiced" into consciousness, resulting in more conformity behavior than was exhibited in order one. The conformity behavior of the LA, like that of the HA, was approximately the same for both levels of stress. So little is known about the LA that there are two interpretations which are equally plausible but depend upon one's beliefs concerning the personality make-up of the LA. Adorno's views would be that the LA, being an individual who is very tolerant of human frailities, would simply not be aroused by T's insults. On the other hand, theorists such as Rokeach may hold that the development of the LA and HA would be quite similar, with the LA having just as much hostility as the HA.

However, the content of their values would differ and the reasons for the suppression of their hostile impulses would be different. Nevertheless, the LA would probably be just as aroused as the HA and, like the HA, would suffer a great deal of anxiety if such hostility were expressed in such a situation as a psychology experiment.

The MA demonstrated a much greater change in conforming behavior as the various situational variables were manipulated than did either the LA or the HA. In order two, the MA reacted very much like the LA, showing slight changes in behavior as race of T and stress level varied. In order one, however, the MA under stress conformed more with the Indian T than either the LA or HA and conformed less with the white T than either the LA or HA. However, under low stress the MA conformed only moderately with the Indian T, but conformed more with the white T than either the HA or the LA. The MAs might be expected to show a great deal of responsiveness to the change in stress levels since they would be less concerned by the presence of the authority figure (E) than either the LA or the HA. The fact that the MA conforms may indicate that there are certain guilty feelings generated in the presence of an insulting Indian. If the behavior of T was viewed as an unfortunate product of society of which S is a part, than S's conformity behavior may indicate his wish for T to see him as different and thus not responsible. However, in the order two condition, the arousal from the insults of T has had time to dissipate and T has supposedly rated S badly anyway, so such ingratiating behavior does not appear. Of course, when T was Caucasian there would be more of a tendency to

simply view T as an inadequate personality since the emphasis on social causality has been popularized considerably more for minority groups in particular than for people in general.

There was less variability in conformity behavior in order two than in order one. This may be due to the fact that in order two the arousal caused by the alphabet task has had time to dissipate and the intervening rating task in order two has acted as a distractor

Experiment Evaluation

Responses on question two of the experiment evaluation form suggest that the Ss were not providing an objective account of their pre-experimental mood. The significant order effect alone may suggest that, by chance, the Ss used in the order one condition entered the laboratory in a more disagreeable mood than those Ss in order two. However, the fact that the race X stress interaction was also significant would seem to indicate that the variability in response was more likely due to the conditions within the experiment rather than to the improbable systematic variations in mood prior to it. Thus, since the response to this question was probably biased in some manner by the experimental conditions, the findings are difficult to interpret because of the many ways in which the meaning of the question for S and the experimental conditions could interact. Since the instrument itself has never been used in previous research and since the findings did not seem to be of any help in interpreting other data it was felt that any additional discussion would not be worthwhile.

Correlations

A number of correlation coefficients were calculated (Appendices J, K, and L) but the only meaningful relationship which emerged was that between the conformity score and the rating of E. Even this relationship proved to be quite tenuous since it appeared only in particular combinations of the levels of stress, race and order.

When T was an Indian the conformity scores were positively correlated with the rating of T only in the high stress conditions. this seems to indicate simply that in the low stress conditions the Ss would feel less sure and less intensely involved in the validity of their evaluations. Festinger's (1957) dissonance theory predicts that a person is only concerned with expressing a cognitively consistent evaluation of an ambiguous stimulus if he feels a reasonable degree of personal involvement in the course of his evaluative actions. Therefore, in the high stress conditions the Ss may be expected to believe rather strongly that T possesses undesirable personality characteristics. Such less than neutral feeling should be sufficient to elicit relatively consistent behavior from S, especially since the situation is ambiguous enough so that such consistency is not suppressed.

On the other hand, such an interpretation is not supported by the behavior of S when T is Caucasian. The only significant correlations that occur when T is a Caucasian are in the order one condition. In addition, the significant positive correlation occurs in the low stress condition while a significant negative correlation occurs in the high stress condition. It may be the case that the Ss felt more confident

in guessing about the personality of a Caucasian than that of an Indian. Hence, in the low stress condition the positive correlation between conformity scores and the rating of T may reflect a general commitment on the part of S regarding the evaluation of T. When T is Indian, a more definitive sample of behavior--such as the insulting remarks--is needed before S feels that he can make a rational rating. Under the high stress condition, the better the Caucasian T is rated, the smaller the conforming score. This negative correlation can be explained in terms of the overcompensation theory of interpersonal evaluation by Walster, Walster, Abrahams & Brown (1966). That is, S mentally evaluates T in a negative fashion in the high stress condition. However, in the course of the conforming task T behaves in a serious, task-oriented manner. According to Walster's overcompensation theory, the S's subsequent rating of T will tend to be biased in the positive direction if he views his initial evaluation of T as being unfairly negative.

In the order two condition there are no correlations between rating scores and conformity behavior when T is Caucasian. In this condition the initial rating of T is more difficult to alter through the overcompensation effect since the initial rating is fully conscious and committed to writing instead of simply being initially held in an unstated, subjective manner as occurs in the order one condition. This interpretation is supported in a study by Walster and Prestholdt (1966) demonstrating that the overcompensation effect is reduced as initial judgments become more difficult to retract.

Conclusions and Further Research

The fact that there was little relationship between the attitude scale scores and the behavior in an interpersonal situation suggests several avenues of further investigation. First, there is the consideration suggested by Rokeach (1960) that ethnocentric attitudes may not reflect racial prejudice but, rather, belief prejudice. The Ss in the present experiment were interacting with a non-typical representative of the Indian race, i.e., one who not only attended college but was also enrolled in the same subject as S. Rokeach (1960) has demonstrated that judges will react on the basis of race when no other cues are available. Therefore, it is possible that reactions on an attitude questionnaire concerning "Indians in general" reflects a basic attitude which may never, in non-laboratory life, act as the sole, or even a major determinant of behavior. To measure the effect of belief similarity it would be possible to use a partner who would vary in both race and status. The latter could be varied by using a college-attending peer and, say, a grounds-keeper.

The factor that has been responsible for the greatest difficulty in interpretation of the present data is the order effect. The data has been confounded since there is no way of knowing how either the anticipation or performance of one task will affect or has affected performance on a second task. Of course, the present study was designed with the anticipation that the order effect would be quite negligible. It is of theoretical interest in itself to know which tasks will affect

subsequent tasks since the prediction of human behavior by social psychologists frequently implies social settings and, hence, elicitation of some interpersonal interaction prior to or following the recorded data. However, the present study has indicated that it may be more efficient to begin such a research program by collecting data on single tasks.

Another problem which should be accounted for is the varying time lapse between the arousal of S and the performance of any one task. It is known that if a person is insulted but not allowed to aggress, his arousal, measured by both physiological and psychological means, will decrease after a short time. Thus, in any interpersonal evaluative situation such factors must be considered.

In the course of any discussion on arousal one must always consider carefully the manipulations defining different degrees of arousal and the concomitant possible interactive effect of individual differences. In the present study it seems as if the stress levels differed on a qualitative rather than a quantitative dimension. That is, the minimal arousal of the Ss in the low stress level arose from their not knowing how they performed on the alphabet task. On the other hand, the arousal in the high stress conditions was more directly due to the insulting partner and thus more easily identifiable and open to the application of past experience. Future studies would be more assured of varying stress on a quantitative level by having T behave in a neutral manner while manipulating the amount of white noise during S's attempt to perform the alphabet task. Such a means

of arousal may have differential effects on individuals varying in noise sensitivity or ability to work under distraction. However, these types of biases would not be as important as the differences in the behavior of the LA and the HA in reaction to an insulting individual. After all, part of the personality make-up of the HA includes an expectation that people are bad and that the world is a threatening place. The LA, on the other hand, views people, and the world, as basically good (Adorno et al., 1950). Thus, when faced by an insulting individual the expectations of the LA will be disconfirmed while the expectations of the HA will be confirmed under objectively identical conditions. This may account for the extremely hostile behavior of the LA relative to that of the HA in the present study. This point could, perhaps, be checked by the use of physiological measures and questionnaires.

This latter point brings up the problem of the usefulness of the personality types as determined by different F-scale scores. The present study utilized only extreme scoring individuals on the assumption that despite the differences in beliefs there may be certain similarities in behavior between the two personality types regarding conforming behavior and the expression and displacement of hostility. Adorno and his colleagues (1950) had predicted the existence of a sub-type of LA who may share many personality characteristics of the HA, but no research was conducted to define this possible sub-type in terms of F-scale scores. In 1960, Rokeach suggested that Ss espousing extreme attitudes may share personality characteristics

which would be different from those persons espousing more moderate attitudes. This latter suggestion implied that the sub-type of LA, referred to by Adorno above, could be defined simply by selecting those Ss who scored extremely low on the F scale. However, the present study used extreme scorers and demonstrated that such similarities did not appear between the LA and the HA. It is entirely possible that the use of extreme high scorers as a comparison group resulted in the inadvertent selection of a peculiar sub-type of HA not strictly representative of the usual high authoritarian as dealt with by the Adorno study (1950). That is, the F scale was not especially designed to select both the HA and the LA scorers in a symmetrical fashion. If there are simply fewer non-authoritarians than high authoritarians in the population, or, alternatively, if LAs are less variable in their responses than are the HAs, it may be that the lower ten percent of the scoring population are more like the upper thirty percent than either group is to the moderate scorers. Of course, such considerations could lead one to a more detailed analysis of the F scale. A great deal of literature has been devoted to such analyses, but only at the questionnaire level. For those inclined to such activities, a great deal of work is yet to be conducted on the relation between F-scale scorers and behavior.

Another alternative is to forego the notion that the F scale is either a measure of personality type or a predictor of behavior--except, perhaps, for responses on other attitude scales. There is, after all, no logical or psychological necessity that attitudes

concerning a general concept should be congruent with a particular behavior in a particular situation. That is, knowing a person's attitudes toward several concepts individually has proven to be of little use in predicting the same person's behavior in the presence of a collection of such concepts. Simply in terms of predictive efficiency, if not theoretical neatness, it would seem better to be able to predict behavior on the basis of a limited number of situational variables. The F-scale provides the experimenter with a sample of the content of the S's cognitions. However, to know the manner in which an individual thinks would, perhaps, provide more predictive generality. In other words, we should know how one thinks in order to understand what one thinks. This knowledge of what Rokeach (1960) refers to as cognitive style permits one to make a logical deduction of an individual's behavior in a novel situation. But, knowledge of content permits prediction only on the basis of a non-logical extrapolation from one general statement to a specific situation. An approach to delimiting personality types on the basis of cognitive style has also been made by Harvey, Hunt and Schroeder (1961). Both these latter theorists and Rokeach have studied cognitive style through the measurement of perceptual responses in both social and asocial circumstances.

Of course, such an approach does not eliminate the usefulness of all the data collected using the F scale. However, where interpersonal behavior is in question, and the S is immersed in an environment of several meaningful variables, then knowledge of cognitive

style is likely to be more efficient than knowledge of cognitive content. On the other hand, when the experimental situation involves the manipulation of only one or two relevant variables, the knowledge of cognitive content--attitudes toward isolated concepts represented by these variables--may well suffice for accurate prediction. Thus, the F scale may be adequate for prediction of other attitudes or for prediction of behavior in situations with a very limited number of independent variables. However, as the validation of theories becomes more dependent upon their usefulness in multivariate studies it is suspected that the present popularity of the F scale will diminish rapidly.

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A P P E N D I C E S

Appendix A

California Fascist (F) Scale

1. Obedience and respect for authority are the most important virtues children should learn.

2. Science has its place, but there are many important things that can never possibly be understood by the human mind.

3. A person who has bad manners, habits and breeding can hardly expect to get along with decent people.

4. When a person has a problem or worry, it is best for him not to think about it, but to keep busy with more cheerful things.

5. Every person should have complete faith in some supernatural power whose decisions he obeys without question.

6. No weakness or difficulty can hold us back if we have enough will power.

7. Human nature being what it is, there will always be war and conflict.

8. Nowadays when so many different kinds of people move around and mix together so much, a person has to protect himself especially carefully against catching an infection or disease from them.

9. If people would talk less and work more, everybody would be better off.

10. Young people get rebellious ideas sometimes, but as they grow up they ought to get over them and settle down.

11. What the youth needs most is strict discipline, rugged determination, and the will to work and fight for family and country.

12. Nowadays more and more people are prying into matters that should remain personal and private.

13. Some people are born with the urge to jump from high places.

14. An insult to our honor should always be punished.

15. Familiarity breeds contempt.

Appendix A (Continued)

16. Wars and social troubles may someday be ended by an earthquake or flood that will destroy the whole world.

17. Sex crimes, such as rape and attacks on children, deserve more than mere imprisonment; such criminals ought to be publicly whipped or worse.

18. The businessman and the manufacturer are much more important to society than the artist and the professor.

19. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith.

20. There is hardly antying lower than a person who does not feel a great love, gratitude, and respect for his parents.

21. People can be divided into two classes: the weak and the strong.

22. The wild sex life of the old Greeks and Romans was tame compared to some of the goings-on in this country, even in places where people might least expect it.

23. Homosexuals are hardly better than criminals and ought to be severely punished.

24. No sane, normal, decent person could ever think of hurting a close friend or relative.

25. Most of our social problems would be solved if we could somehow get rid of the immoral, crooked, and feebleminded.

26. Some day it will probably be shown that astrology can explain a lot of things.

27. Most people don't realize how much our lives are controlled by plots hatched in secret places.

28. Nobody ever learned anything really important except through suffering.

Appendix B

Anti-Indian Scale

1. If there are enough Indians who want to attend dances at a local dance hall featuring an Indian band, a good way to arrange this would be to have one all-Indian night, and then the whites could dance in peace the rest of the time.

2. The Indians would solve many of their social problems by not being so irresponsible, lazy, and ignorant.

3. It would be a mistake to have Indians for foremen and leaders over whites.

4. Indians may have a part to play in white civilization, but it is best to keep them in their own districts and schools and to prevent too much intermixing with whites.

5. Manual labor and menial jobs seem to fit the Indian mentality and ability better than more skilled or responsible work.

6. The people who raise all the talk about putting Indians on the same level as whites and giving them the same privileges are mostly radical agitators trying to stir up conflicts.

7. It would be best to limit Indians to grammar and trade school education since more schooling just gives them more ambition and desires which they are unable to fulfill in white competition.

8. There is something inherently primitive and uncivilized in the Indian, as shown in his extreme aggressiveness.

9. Most Indians would become officious, overbearing, and disagreeable if not kept in their place.

Appendix C

Adjective Check List (Personality Rating Scale)

Trait X:	very characteristic						very uncharacteristic
Grateful							
wise							
reputable							
honest							
industrious							
affectionate							
mature							
cheerful							
sensitive							
fair							
friendly							
sociable							
warm							
co-operative							
good							
clean							

Appendix D

Experiment Evaluation Form

How was your performance on the first task (saying the alphabet backwards) influenced by the subject-experimenter?

very positively	positively	not at all	negatively	very negatively

Can you describe your mood - just before entering the research room?

extremely agreeable	agreeable	neutral	disagreeable	extrenely disagreeable

-Just after the task of saying the alphabet backwards?

extremely agreeable	agreeable	neutral	disagreeable	very disagreeable

- Just before you began answering this questionnaire?

extremely agreeable	agreeable	neutral	disagreeable	very disagreeable

Did you possess any knowledge concerning the identity of the other subject before you entered the research room?

<u>Circle one</u> - Yes No

Appendix E

Instructions

Pre-Task Instructions

E. Can you hear me clearly in there? Just push down that lever on the box in front of you to speak back.

T. Yeah, fine.

E. Good, now I'll tell you both briefly about the experiment you will be participating in today. Please listen carefully.

First, you will take part in a study on the effects of the experimenter's personality on task performance. We have chosen a task that has been proven to be independent of intelligence differences or special skills. This task is saying the alphabet backwards.

The subject who arrived here first is in the room on the other side of the one-way glass in front of myself and the other subject. This subject in the adjacent room will be called Bill for the remainder of the experiment. You, Bill, have been chosen to act as an experimenter. The person in this room, whom I will refer to as John, will be your subject. Bill, the details of the task are on a slip of paper in front of you. It is up to you to instruct and urge your subject, John, as you see fit. Any technique you

Appendix E (Continued).

personally feel will be efficient is fine--short of obscenities, of course.

After this, you will both be asked to make personality judgments of one another by just checking off a list of adjectives. In addition, you will also both do a simple weight judging experiment for the psychophysics department.

Now, Bill, from your room you can see John quite clearly. We have used the one-way glass because we want John to make his personality judgment on the basis of auditory cues. However, we want him to have certain basic information about yourself to use as a guide. Please listen carefully now and do not give any information I do not ask for. O.K.?--now--tell us--your height--your weight--your race,--your hair and eye color. Got that? Your height, weight, race, hair and eye color. I'll write this information down so John can have it for later.

T. I'm Canadian Indian (or Canadian White), I'm five feet eleven, weigh 160 pounds, have black hair and brown eyes.

E. Good, now, since I would like you two to remain unknown to one another, I'll have Bill leave a few minutes before you John. Bill, you're asked not to speak to John about this experiment if you see him again. Agreed?

Appendix E (Continued).

T. O.K.

E. All right John, for the next few minutes you are the subject of Bill, the experimenter. All right Bill, start John on his task.

Instructions for the Conformity Task

E. A weight judgment study is being conducted for the psychophysics department. You both have identical sets of weights. That is, the number one weight in this room weighs exactly the same as the number one weight in the next room, and so on for all the other weights. The number one is of a slightly different weight from any of the other numbers --two through to thirteen. The number two is of a slightly different weight than either number one or numbers three through 13--and so on. In other words, each number is of a slight, but noticeably different weight from any other number in the set.

I will call two numbers for each trial. Pick up the first number I call first, then the second number. Please use only one hand for all trials. Tell me the number of the weight that is the heavier of the two. Give me your first impression. Since accuracy in recording your judgments is

Appendix E

crucial, I'll do that job. I'll have to ask you to give me your judgments in a certain order so I don't get your judgments mixed up. Let's see--Bill, you will give your response first. John--your response will always come after Bill. If there are no questions we may start right now

NOTE: E asks subject to compare pairs 1 and 2, 1 and 3, ... 1 and 13. T's responses are, respectively: 2, 1, 4, 5, 1, 1, 8, 1, 10, 1, 1, 13.

Instructions for the Personality Rating Task

E. The personality rating experiment is being conducted for the purpose of identifying those observable traits which persons rely upon in judging strangers. Bill's judgment of John will be very much like a non-laboratory judgment since the one-way glass allows him to use all possible visual traits. However, you, John, will be limited to only the use of those traits of Bill which you heard earlier and should have on that piece of paper I gave to you.

Now, if you will both pick up the papers on the left end of the table and turn them over you should have two adjective rating scales and a page of instructions. If you do not

Appendix E (Continued)

have these three sheets please tell me now. O.K., now, after reading the instruction sheet, you will then make a rating of the other subject. That is, Bill, you will rate John and John, you will rate Bill. When you have completed this rating sheet you will slide it into the block, padlocked box on your right through that slot on the top. After you have done this then, on the second rating sheet, you will rate, me, the experimenter. The rating you make of me will provide us with a kind of average on how good you each are at rating people, since you have both had about the same amount of contact with me. You will put this rating of myself in the box as soon as you have completed it. Please be certain you have placed the rating of the other subject in the box before you begin to rate me. There is no need to put your names on these ratings. Furthermore, you may be assured that only the person in charge of this experiment has a key to the box. Read the instruction sheet now and commence rating. If you have any questions now or after reading the instructions please speak up. Please let me know when you have completed both rating scales by tapping your pencil on the table a few times.

Appendix E (Continued)

INSTRUCTIONS

The purpose of this scale is to obtain a description of other people. On each page you will find a different person to be described and beneath it a set of scales. You are to describe each person on each of these scales in order.

If you feel that the person indicated at the top of the page is very well described by one end of the scale, you should place your check-mark as follows:

Trait X:

X

very characteristic or very uncharacteristic

X

very characteristic or very uncharacteristic

If you feel the person is quite well described by one or the other end of the scale, (but not extremely), you should place your check-mark as follows:

X

very characteristic or very uncharacteristic

X

very characteristic or very uncharacteristic

If the person seems only slightly described by one side or the other (but is not really neutral), then you should check as follows:

X

very characteristic or very uncharacteristic

X

very characteristic or very uncharacteristic

If you consider the person neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your check-mark in the middle space:

X

very characteristic or very uncharacteristic

Appendix E (Continued)

Important:

(1) Place your check-marks in the middle of spaces, not on the boundaries.

(2) Be sure you check every scale for every person, don't omit any.

(3) Never put more than one check-mark on a single scale.

(4) Make each item a separate and independent judgment. Work at fairly high speed. It is your first impressions, the immediate feelings about the items we want. On the other hand, please do not be careless, because we want your true impressions.

Appendix F

Form on which Subject Received T's Personality Characteristics

DATA SHEET

Race: Canadian Indian (or, Canadian-Indian)

Height: 5'11"

Weight: 160 lbs.

Hair Color: Black

Eye Color: Brown

Appendix G

T's non-insulting monologue[1]

T: O.K., please don't ask questions this task will be quite simple. You just start at Z and start saying the alphabet backwards as fast as you can. Try to keep your mistakes to a minimum. Just start Z-Y-X and so on. O.K. get ready--now go!

(S starts on the task)

T: O.K., that's far enough. I'm all done now Mr. experimenter.[2]

---

[1]This monologue follows immediately the end of the pre-task instructions of Appendix E.

[2]T interrupted S with this statement after S worked on the task for one minute or has reached the letter H--whichever was first.

Appendix H

T's Insulting Monologue

T: O.K. friend, we'll work best if you just keep all your questions and comments to yourself while I'm in charge. All you have to know about this job is that you start at Z and start saying the alphabet backwards until I tell you to stop. Go as fast as you can and don't make mistakes. Just start Z-Y-X and so on. O.K., get ready--now go!

(S starts on the task but is interrupted whever he pauses)

T: Come on, you're supposed to be college material--a little faster. (S starts and stops.) That's it, you're great at pauses--let's have a few more letters. (S starts and stops.) No stopping now, can't you just follow simple orders? (S either stops and starts or still remains silent.) Let's go! That face making isn't helping your speed any. (Again, either a start and stop or silence.) You're great at long silences--a little cooperation on your part and you could be about half-way to where I could be by now. (Most Ss have stopped at this point.) What good is this giving-up game? A few more letters and we could compete for the all-time slow record. (If S doesn't start again T continues.) O.K., actually you were finished a while back. You just needed a little "putting on" to get that saintly look off your face. O.K. Mr. experimenter, I guess I'm through with that.

Appendix I

Summary of Experiment Provided for Ss

FOR SUBJECTS WHO HAVE PARTICIPATED IN EXPERIMENT 23 (MARMY).

IN THIS EXPERIMENT we were interested in observing peoples behavior under two different conditions of emotional arousal. In one condition, participants heard a "bossy", talkative individual. In the other condition, participants heard a normal, or neutral, individual. Since it is important to have identical conditions for all participants, we used tape recordings of one individual 'playing' the two different roles. The recorder was controlled by the experimenter in the room with you. In this way, the tape recorded voice could be turned on or off to fit in with your attempts to recite the alphabet backwards.

IN ADDITION, the 'other subject' was supposedly an Indian for some of the participants and a non-Indian for other participants. It was expected that people would dislike a 'bossy' Indian more intensely than a 'bossy' non-Indian. Furthermore, it was expected that people would tend to disagree more with someone they didn't like than with a person toward whom they feel relatively neutral. This was tested by having participants judge the heavier of several pairs of objects that were, in reality, all of the same weight. Since there was no 'correct' answer for each judgment, participants really were either agreeing or disagreeing with the 'other subject' for emotional reasons rather than for reasons based on actual sensations of heaviness.

Appendix J

Correlations Between all Pairs of Dependent Variables Averaged Over all Independent Variables

1	2	-.112	-.031	.067	.008	.095	.042	.072
2	3	.431	.334	.019	.162	.153	.780	
3	4	.091	.077	.056	.204	-.001		
4	5	-.001	.253	.223	.328			
5	6	.233	.319	-.074				
6	7	.648	.155					
7	8	-.005						

1: Conformity scores

2: Rating of "other" subject

3: Rating of experimenter

4: Question one of experimenter evaluation. (How was your performance on the alphabet task by T's behavior?)

5: Question two of experimenter evaluation. (How was your mood before entering the research room?)

6: Question three of experimenter evaluation. (How did you feel immediately after saying the alphabet backwards?)

7: Question four of experimenter evaluation. (How did you feel immediately before answering this questionnaire?)

8: Difference score.

Appendix K

Correlations Between all Pairs of Dependent Variances Over Each Combination of the Levels of Stress, Race and Order

Low Stress	1	2	.097	-.080	.522	-.097	.0715	-.331	.112
	2	3	.767	-.212	.371	-.057	.044	.287	
Indian T	3	4	-.541	-.055	-.139	-.232	-.184		
	4	5	.122	.341	.415	.387			
Order One	6	7	.303	.570					
	7	8	.337						
Low Stress	1	2	.353	.279	.148	-.080	.190	.122	.164
	2	3	.435	.089	.109	-.392	-.274	.715	
Indian T	3	4	.137	.261	.037	.075	-.170		
	4	5	-.000	.155	-.000	.018			
Order Two	5	6	.315	.393	-.023				
	6	7	.765	-.123					
	7	8	-.205						
Low Stress	1	2	-.633	.126	.330	-.000	.365	.158	-.478
	2	3	.192	.114	.282	-.312	-.475	.474	
Caucasian T	3	4	.558	.882	.456	.278	-.148		
	4	5	.213	.000	.119	-.124			
Order One	5	6	.408	.255	-.106				
	6	7	.046	-.380					
	7	8	-.639						
Low Stress	1	2	.012	-.075	.450	.039	.349	.216	-.013
	2	3	.415	.482	-.112	.588	.639	.389	
Caucasian T	3	4	.479	.409	.066	.406	-.197		
	4	5	-.066	.232	.139	.048			
Order Two	5	6	-.029	.000	-.333				
	6	7	.717	.389					
	7	8	.484						
High Stress	1	2	-.659	-.010	-.015	-.295	-.134	-.313	-.635
	2	3	.232	.362	-.433	.425	.111	.908	
Indian T	3	4	-.399	-.450	-.235	-.183	-.109		
	4	5	.033	.730	.520	.425			
Order One	5	6	-.298	.347	-.311				
	6	7	.368	.485					
	7	8	.052						

Appendix K (Continued)

High Stress	1	2	-.627	.029	.028	-.187	-.310	-.355	-.501
	2	3	.460	.038	.059	.369	.536	.617	
Indian T	3	4	.017	.127	.271	.443	-.370		
	4	5	-.397	.265	.345	.122			
Order Two	5	6	.644	.527	-.193				
	6	7	.932	.041					
	7	8	.086						
High Stress	1	2	.662	.349	-.113	.126	-.089	.084	.270
	2	3	.607	-.111	.187	.153	.113	.365	
Caucasian T	3	4	.228	.448	.512	.547	.218		
	4	5	.203	.670	.466	-.078			
Order One	5	6	.566	.504	-.120				
	6	7	.570	-.113					
	7	8	-.505						
High Stress	1	2	.098	-.399	-.177	.394	.332	.090	.303
	2	3	.443	.573	-.023	.055	-.106	.945	
Caucasian T	3	4	.329	-.221	-.324	-.166	.227		
	4	5	-.067	-.132	-.036	.425			
Order Two	5	6	.617	.412	.126				
	6	7	.880	.138					
	7	8	-.144						

<u>Note</u>: See page92 for key of variable identification

Appendix L

Correlation Between all Pairs of Dependent Variables for each level of Authoritarianism, Race, Stress and Order

LA	1	2	-.145	-.177	-.127	-.154	.048	.064	-.043
	2	3	.338	.428	-.128	.077	-.209	.894	
	3	4	.301	-.008	-.035	.146	-.099		
	4	5	-.095	.373	.200	.335			
	5	6	.016	.008	-.154				
	6	7	.643	.127					
	7	8	-.260						
MA	1	2	-.020	-.004	.008	.249	.229	.185	-.041
	2	3	.552	.615	.117	.181	.361	.745	
	3	4	.246	.088	.080	.265	.357		
	4	5	.124	.366	.383	.582			
	5	6	.018	.325	.140				
	6	7	.652	.262					
	7	8	.241						
HA	1	2	-.051	-.010	.230	-,087	.001	-.087	-.029
	2	3	.484	-.000	.030	.306	.337	.587	
	3	4	-.210	.114	.073	.166	-.257		
	4	5	-.017	.011	.120	.226			
	5	6	.643	.586	-.231				
	6	7	.661	.149					
	7	8	.084						
Order One	1	2	-.196	.046	.25	.072	.088	.159	-.220
	2	3	.451	.230	.105	.149	.141	.767	
	3	4	-.063	.044	.107	207	.099		
	4	5	.224	.457	.376	.352			
	5	6	.014	.331	.037				
	6	7	.356	.207					
	7	8	.036						
Order Two	1	2	-.037	-.126	.008	-.073	.108	-.046	.065
	2	3	.411	.389	.003	.191	.140	.787	
	3	4	.214	.157	.019	.203	-.097		
	4	5	-.160	.132	.120	.295			
	5	6	.451	.426	-.145				
	6	7	.836	.132					
	7	8	-.047						
Indian T	1	2	-.209	.062	.124	.032	-.074	.009	-.220
	2	3	.405	.269	-.020	.231	.259	.805	
	3	4	-.099	-.108	.022	.175	-.107		
	4	5	-.039	.406	.332	.338			
	5	6	.172	.337	-.061				
	6	7	.649	.242					
	7	8	.120						

Appendix L (Continued)

Caucasian T	1	2	.013	-.139	.011	-.032	.288	.071	.148
	2	3	.472	.410	.080	.097	.047	.754	
	3	4	.308	.316	.053	.201	.140		
	4	5	.060	.154	.172	.301			
	5	6	.329	.307	-.094				
	6	7	.624	.084					
	7	8	-.136						
Low Stress	1	2	-.207	-.058	-.044	.157	.020	.043	-.169
	2	3	.408	.285	-.098	.228	.162	.758	
	3	4	.041	-.013	.032	.168	-.047		
	4	5	-.099	.279	.252	.298			
	5	6	.296	.387	-.137				
	6	7	.756	.181					
	7	8	-.053						
High Stress	1	2	-.207	-.058	-.044	.157	.020	.043	-.169
	2	3	.408	.285	-.098	.228	.162	.758	
	3	4	.041	-.013	.032	.168	-.047		
	4	5	-.099	.279	.252	.298			
	5	6	.296	.387	-.137				
	6	7	.756	.181					
	7	8	-.053						

Correlations between all pairs of dependent variables for high, low and moderate authoritarianism when the "other" subject (T) is either Caucasian or Indian

LA	1	2	-.481	-.190	-.409	-.209	-.176	.153	-.384
	2	3	.177	.504	-.265	.076	-.245	.913	
Indian T	3	4	.081	-.098	.002	.122	-.223		
	4	5	-.363	.429	.058	.461			
	5	6	-.082	.086	-.266				
	6	7	.560	.125					
	7	8	-.226						
LA	1	2	.276	-.307	.182	-.088	.130	-.309	.546
	2	3	.518	.373	.103	.122	-.146	.881	
Caucasian T	3	4	.446	.106	-.162	.054	.078		
	4	5	.249	.338	.336	.238			
	5	6	.188	-.123	.067				
	6	7	.668	.247					
	7	8	-.208						
MA	1	2	.134	.137	.249	.441	.031	.137	.242
	2	3	.669	.516	.236	.412	.705	.656	
Indian T	3	4	.050	-.123	.159	.400	.158		
	4	5	.222	.696	.727	.555			
	5	6	.040	.273	.298				
	6	7	.669	.518					
	7	8	.494						

Appendix L (Continued)

MA	1	2	-.190	-.173	-.271	-.012	.466	.247	-.260
	2	3	.392	.706	-.107	-.047	-.061	.875	
Caucasian T	3	4	.443	.347	.021	.088	.570		
	4	5	-.082	-.000	-.076	.664			
	5	6	.027	.425	.012				
	6	7	.636	.027					
	7	8	.004						
HA	1	2	-.065	.105	.258	-.112	-.216	-.321	-.146
	2	3	.217	.020	-.191	.339	.319	.822	
Indian T	3	4	-.469	-.328	-.301	-.418	-.305		
	4	5	.051	.067	.146	.361			
	5	6	.583	.631	-.100				
	6	7	.718	.392					
	7	8	.442						
HA	1	2	.035	-.006	.113	.022	.269	.199	.163
	2	3	.652	.154	.239	.237	.312	.286	
Caucasian T	3	4	.175	.350	.207	.417	-.207		
	4	5	.070	.057	.234	-.116			
	5	6	.715	.529	-.462				
	6	7	.604	-.141					
	7	8	-.375						

Correlations between all pairs of dependent variables for high, low and moderate authoritarianism under high and low stress conditions

LA	1	2	-.054	-.303	.041	-.648	.226	.349	.238
	2	3	.394	.540	.046	-.256	-.195	.762	
Low Stress	3	4	.675	.181	.054	.124	-.240		
	4	5	.079	.479	.261	.157			
	5	6	.063	-.144	-.099				
	6	7	.624	-.207					
	7	8	-.215						
LA	1	2	-.201	-.108	-.206	.153	-.034	-.098	-.168
	2	3	.496	.415	-.235	.102	-.120	.917	
High Stress	3	4	.119	-.146	-.021	.096	.112		
	4	5	-.195	.331	.187	.445			
	5	6	-.009	.114	-.218				
	6	7	.769	.127					
	7	8	-.173						

Appendix L (Continued)

MA	1	2	.146	.171	.214	.108	.323	.070	-.045
	2	3	.493	.324	.258	-.000	.126	.170	
Low Stress	3	4	.265	.404	-.052	.196	-.009		
	4	5	.268	.378	.145	.255			
	5	6	-.101	.243	-.154				
	6	7	.439	.426					
	7	8	.420						
MA	1	2	-.110	-.091	-.146	.407	.140	.301	-.067
	2	3	.497	.565	-.249	.161	.256	.654	
High Stress	3	4	.109	-.164	.078	.193	.280		
	4	5	-.181	.310	.359	.515			
	5	6	.015	.246	-.096				
	6	7	.794	.143					
	7	8	-.084						
HA	1	2	.073	.148	.370	-.087	.002	-.031	-.021
	2	3	.741	-.356	.216	.300	.265	.284	
Low Stress	3	4	-.419	.221	.334	.457	-.210		
	4	5	.070	-.225	.070	-.272			
	5	6	.455	.495	-.013				
	6	7	.555	.234					
	7	8	-.038						
HA	1	2	-.227	-.112	.073	-.071	.010	-.148	-.110
	2	3	.445	-.066	.105	.436	.424	.528	
High Stress	3	4	-.199	.110	-.014	.080	-.368		
	4	5	.051	.239	.161	.159			
	5	6	.773	.660	-.183				
	6	7	.737	.257					
	7	8	.133						

Correlations between all pairs of dependent variables for high, low and moderate authoritarianism under each order condition.

LA	1	2	-.347	.063	-.289	-.396	-.267	-.095	-.401
	2	3	.450	.448	-.173	.312	.030	.932	
Order 1	3	4	.021	-.241	.126	.033	.101		
	4	5	-.144	.717	.323	.504			
	5	6	-.199	.089	-.119				
	6	7	.632	.320					
	7	8	.021						

Appendix L (Continued)

LA	1	2	.040	-.335	-.031	.394	.340	.034	.243
	2	3	.263	.416	-.109	-.131	-.340	.866	
Order 2	3	4	.479	.179	-.149	.222	-.227		
	4	5	-.038	.096	.144	.213			
	5	6	.318	.076	-.199				
	6	7	.697	-.038					
	7	8	-.425						
MA	1	2	.318	.142	.278	.265	.268	.328	.061
	2	3	.357	.405	.633	.021	.400	.766	
Order 1	3	4	-.040	.164	-.018	.104	.414		
	4	5	.413	.600	.617	.531			
	5	6	-.035	.492	.437				
	6	7	.309	.398					
	7	8	.417						
MA	1	2	-.205	-.192	-.341	.134	.259	.165	-.135
	2	3	.712	.742	-.217	.221	.262	.770	
Order 2	3	4	.557	.025	.143	.360	.375		
	4	5	-.290	.153	.119	.625			
	5	6	.136	.329	-.252				
	6	7	.837	.154					
	7	8	.087						
HA	1	2	-.136	-.034	.298	.313	.142	.174	-.038
	2	3	.742	-.155	-.199	.170	.090	.355	
Order 1	3	4	-.146	.010	.264	.396	-.288		
	4	5	.408	-.114	.136	-.098			
	5	6	.390	.333	-.416				
	6	7	.167	-.022					
	7	8	-.404						
HA	1	2	.041	.015	.218	-.413	-.142	-.253	.001
	2	3	.186	.087	.301	.528	.562	.767	
Order 2	3	4	-.275	.234	-.065	-.001	-.272		
	4	5	-.187	.144	.130	.327			
	5	6	.744	.744	-.075				
	6	7	.954	.341					
	7	8	.317						

Correlations between all pairs of dependent variables for each order when the "other" subject (T) is either Caucasian or Indian.

Indian T	1	2	-.215	.021	.273	.172	-.009	.188	-.201
	2	3	.341	.291	-.056	.331	.316	.890	
Order 1	3	4	-.358	-.291	-.175	-.108	-.000		
	4	5	.120	.577	.523	.432			
	5	6	-.262	.372	-.030				
	6	7	.378	.448					
	7	8	.326						

Appendix L (Continued)

High Stress	1	2	-.219	.078	.032	.286	-.082	.231	-.329
	2	3	.385	.171	-.172	.323	.118	.694	
Order One	3	4	-.097	-.057	.121	.213	-.035		
	4	5	.158	.700	.489	.304			
	5	6	.051	.412	-.176				
	6	7	.463	.315					
	7	8	-.113						
High Stress	1	2	-.211	-.220	-.137	.093	.109	.082	-.034
	2	3	.452	.353	.013	.166	.188	.804	
Order Two	3	4	.190	-.024	-.045	.151	-.050		
	4	5	-.259	.023	.142	.281			
	5	6	.622	.487	-.050				
	6	7	.903	.092					
	7	8	-.023						

Correlation between all pairs of dependent variables for each level of stress when the "other" subject (T) is either Caucasian or Indian

Indian T	1	2	.271	.159	.314	-.198	.029	.044	.181
	2	3	.524	-.043	.129	-.272	-.150	.650	
Low Stress	3	4	-.161	.039	-.067	.030	-.138		
	4	5	.115	.282	.124	.071			
	5	6	.046	.142	-.041				
	6	7	.414	-.023					
	7	8	-.056						
Indian T	1	2	-.633	.003	-.019	.207	-.159	-.018	-.553
	2	3	.346	.189	-.224	.376	.355	.766	
High Stress	3	4	-.157	-.205	.025	.202	-.237		
	4	5	-.209	.422	.379	.250			
	5	6	.212	.412	-.204				
	6	7	.737	.259					
	7	8	.074						
Caucasian T	1	2	-.482	-.220	.108	-.141	.336	.016	-.285
	2	3	.558	.525	.276	.137	.378	.473	
Low Stress	3	4	.611	.615	.126	.469	-.012		
	4	5	.194	.114	.254	.114			
	5	6	.164	.215	-.113				
	6	7	.409	.089					
	7	8	.214						

High Stress	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	2	[illegible]	[illegible]	[illegible]	-.172	.293	.110	[illegible]			
Order One	3	[illegible]	-.037	.111	.213	[illegible]					
	4	[illegible]	.180	.700	.089	.304					
	5	[illegible]	[illegible]	.112	-.176						
	6	[illegible]	.06	.315							
	7	[illegible]	-.112								
High Stress	1	[illegible]	-.121	-.000	-.117	.093	.129	[illegible]	[illegible]		
	2	[illegible]	[illegible]	-.133	.023	[illegible]	.108	.104			
Order Two	3	[illegible]	[illegible]	[illegible]	-.047	.121	-.030				
	4	[illegible]	-.070	.023	.142	.081					
	5	[illegible]	.105	.187	-.030						
	6	[illegible]	.201	.092							
	7	[illegible]	-.[illegible]								

Correlation between all pairs of dependent variables for each level of stress when the "other" subject (T) is either Caucasian or Indian

Indian T	1	[illegible]	.271	-.127	[illegible]	-.108	[illegible]	.041	[illegible]		
	2	[illegible]	.321	-.041	.100	-.272	-.101	.630			
Low Stress	3	[illegible]	-.161	[illegible]	-.027	[illegible]	-.131				
	4	[illegible]	.115	[illegible]	[illegible]	.071					
	5	[illegible]	.016	.112	-.041						
	6	[illegible]	.117	-.[illegible]							
	7	[illegible]	[illegible]								
Indian T	1	[illegible]	-.011	.000	-.011	.207	-.121	-.010	-.373		
	2	[illegible]	.341	.101	[illegible]	.376	[illegible]	.766			
High Stress	3	[illegible]	-.157	-.209	[illegible]	.202	[illegible]				
	4	[illegible]	[illegible]	.103	[illegible]	.490					
	5	[illegible]	.141	.116	[illegible]						
	6	[illegible]	.137	[illegible]							
	7	[illegible]	[illegible]								
Caucasian T	1	[illegible]	[illegible]	[illegible]	[illegible]	-.142	.010	-.283			
	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.573				
Low Stress	3	[illegible]	.011	[illegible]	.142	.069	-.012				
	4	[illegible]	[illegible]	.111	[illegible]	.114					
	5	[illegible]	[illegible]	[illegible]	-.119						
	6	[illegible]	.000	[illegible]							
	7	[illegible]	[illegible]								

Appendix L (Continued)

Caucasian T	1	2	.276	-.125	-.063	.076	.249	.123	.358
	2	3	.476	.343	.049	.096	-.030	.751	
High Stress	3	4	.228	.242	.032	.133	.150		
	4	5	-.003	.182	.153	.310			
	5	6	.460	.370	-.061				
	6	7	.778	.110					
	7	8	-.205						

<u>Note:</u> See page 92 for key of variable identification